NiSource Inc. - Climate Change 2019

C0. Introduction

C0.1

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

NiSource Inc. is an energy holding company under the Public Utility Holding Company Act of 2005 whose subsidiaries are fully regulated natural gas and electric utility companies serving approximately 4.0 million customers in seven states. NiSource is the successor to an Indiana corporation organized in 1987 under the name of NIPSCO Industries, Inc., which changed its name to NiSource on April 14, 1999. NiSource is one of the nation's largest natural gas distribution companies, as measured by number of customers. NiSource's principal subsidiaries include NiSource Gas Distribution Group, Inc., a natural gas distribution holding company, and NIPSCO, a gas and electric company. NiSource derives substantially all of its revenues and earnings from the operating results of these rate-regulated businesses. NiSource's reportable segments are: Gas Distribution Operations and Electric Operations. The following is a summary of the business for each reporting segment.

Gas Distribution Operations

Our natural gas distribution operations serve approximately 3.5 million customers in seven states and operate approximately 60,000 miles of pipeline located in our service areas described below. Through our wholly-owned subsidiary NiSource Gas Distribution Group, Inc., we own six distribution subsidiaries that provide natural gas to approximately 2.6 million residential, commercial and industrial customers in Ohio, Pennsylvania, Virginia, Kentucky, Maryland and Massachusetts. Additionally, we distribute natural gas to approximately 832,000 customers in northern Indiana through our wholly-owned subsidiary NIPSCO.

Electric Operations

We generate, transmit and distribute electricity through our subsidiary NIPSCO to approximately 472,000 customers in 20 counties in the northern part of Indiana and engage in wholesale and transmission transactions. NIPSCO owns and operates two coal-fired electric generating stations: four units at R.M. Schahfer located in Wheatfield, IN and one unit at Michigan City located in Michigan City, IN. The two operating facilities have a generating capacity of 2,080 MW. NIPSCO also owns and operates Sugar Creek, a CCGT plant located in West Terre Haute, IN with generating capacity of 571 MW, three gas-fired generating units located at NIPSCO's coal-fired electric generating stations with a generating capacity of 186 MW and two hydroelectric generating plants with a generating capacity of 16 MW: Oakdale located at Lake Freeman in Carroll County, IN and Norway located at Lake Schahfer in White County, IN. These facilities provide for a total system operating generating capacity of 2,853 MW. In May 2018, NIPSCO completed the retirement of two coal-burning units (Units 7 and 8) at Bailly Generating Station, located in Chesterton, IN. These units had a generating capacity of approximately 460 MW.

NIPSCO's transmission system, with voltages from 69,000 to 765,000 volts, consists of 2,963 circuit miles. NIPSCO is interconnected with five neighboring electric utilities. During the year ended December 31, 2018, NIPSCO generated 69.4% and purchased 30.6% of its electric requirements. NIPSCO participates in the MISO transmission service and wholesale energy market. MISO is a nonprofit organization created in compliance with FERC regulations to improve the flow of electricity in the regional marketplace and to enhance electric reliability. Additionally, MISO is responsible for managing energy markets, transmission constraints and the day-ahead, real-time, FTR and ancillary markets. NIPSCO transferred functional control of its electric transmission assets to MISO, and transmission service for NIPSCO occurs under the MISO Open Access Transmission Tariff.

Source: NiSource 2018 Form 10-K - https://nisource.gcs-web.com/sec-filings/sec-filing/10-k/0001111711-19-000008

C0.2

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

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

C0.3

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

United States of America

C0.4

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

USD

C0.5

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

Operational control

C-EU0.7

(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.

Row 1

Electric utilities value chain

Electricity generation
Transmission
Distribution

Other divisions

Gas storage, transmission and distribution

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Board-level committee	For over a decade, NiSource's commitment to greenhouse gas (GHG) emission reporting and reduction has been guided by the Environmental, Safety and Sustainability (ESS) Committee of the NiSource Board of Directors and implemented across the NiSource companies. The ESS Committee oversees programs, performance and risks relative to environmental, safety and sustainability matters, including climate-related issues. The ESS Committee meets a minimum of four times annually. The Environmental Safety and Sustainability charter for the Committee can be found on the NiSource website at https://www.nisource.com/investors/governance.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The Environmental, Safety & Sustainability (ESS) Board Committee oversees programs, performance and risks relative to environmental, safety and sustainability matters, including climate-related issues. The ESS Committee meets a minimum of four times annually. The Environmental Safety and Sustainability charter for the Committee can be found on the NiSource website at https://www.nisource.com/investors/governance.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Other, please specify (Vice President, Environmental)	Both assessing and managing climate-related risks and opportunities	Quarterly
Chief Executive Officer (CEO)	Assessing climate-related risks and opportunities	Quarterly

C1.2a

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

Our Vice President of Environmental is responsible for assessing and managing climate risks across the organization. He reports to the Sr. Vice President of Safety, Environmental and Training, who reports to the Senior VP of Gas Engineering & Gas Support Services, who reports to our Executive VP and President of Gas Utilities, who reports to our CEO. Regulatory issues pertaining to climate in our industry are monitored by our Environmental Policy team who reports to our Vice President of Environmental. Climate-related issues are also monitored through our participation in trade groups and research organizations (AGA, EEI, and EPRI). We also review climate risks as reported in peer company quarterly SEC filings.

C1.3

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

Yes

C1.3a

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

Who is entitled to benefit from these incentives?

Management group

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction target

Comment

A portion of the NiSource officers' (vice president and above) long-term equity incentive (performance shares) is tied to progress against our publicly disclosed emission reduction targets. This applies to approximately 70 individuals in addition to the CEO and named executives.

C2. Risks and opportunities

C2.1

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

	From (years)	To (years)	Comment
Short-term	0	5	
Medium-term	5	10	
Long-term	10		

C2.2

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

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

C2.2a

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

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	

C2.2b

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

A NiSource management team meets routinely to identify and assess short-term, medium-term, and long-term transitional and physical risks as well as opportunities. Climate-related reviews are a part of the Strategic Planning team, corporate Risk Management Committee, and the Environmental, Safety, & Sustainability Committee of the Board of Directors.

C2.2c

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Current climate regulation, such as the Affordable Clean Energy rule, is assessed for risks.
Emerging regulation	Relevant, always included	While we continue to reduce GHG emissions through priority pipeline replacement, energy efficiency, leak detection, and other programs, and expect to further reduce GHG emissions through increase use of renewable energy, GHG emissions are currently an expected aspect of the electric and natural gas business. Revised or additional future GHG legislation and/or regulation related to the generation of electricity or the extraction, production, distribution, transmission, storage and end use of natural gas could materially impact our financial position, financial results and cash flows. Emerging state and federal regulations are considered in the company's climate-related risk assessments.
Technology	Relevant, always included	Energy conservation, energy efficiency, distributed generation, energy storage and other factors may reduce energy demand.
Legal	Relevant, always included	The company monitors the financial and reputational risk associated with climate-related litigation claims.
Market	Relevant, always included	A potential risk is reduced demand for natural gas and electricity due to a shift in customer preferences. A carbon tax policy, for example, could increase the price of energy and cause shifting customer preferences.
Reputation	Relevant, always included	Natural gas may cease to be viewed as an economically and environmentally attractive fuel, and certain groups may continue to oppose natural gas delivery and infrastructure investments because of perceived environmental impacts associated with the natural gas supply chain and end use.
Acute physical	Relevant, always included	A disruption or failure of natural gas distribution systems, or within electric generation, transmission or distribution systems, in the event of a major hurricane, tornado, flood, or other catastrophic event could cause delays in completing sales, providing services, or performing other critical functions. The occurrence of such events could adversely affect our financial position and results of operations.
Chronic physical	Relevant, always included	Climate change may exacerbate the risks to physical infrastructure. Such risks include heat stresses to power lines, storms that damage infrastructure, lake and sea level changes that damage the manner in which services are currently provided, droughts or other stresses on water used to supply services, and other extreme weather conditions. Climate change and the costs that may be associated with its impacts have the potential to affect our business in many ways, including increasing the cost we incur in providing our products and services, impacting the demand for and consumption of our products and services (due to change in both costs and weather patterns), and affecting the economic health of the regions in which we operate.
Upstream	Relevant, always included	NIPSCO's energy mix is transitioning as we announced the retirement of all of our coal-fired electric generation capacity. In addition, the abundant domestic supply of natural gas, combined with its low cost and positive environmental attributes, will continue to positively impact NiSource. However, certain groups may continue to oppose natural gas delivery and infrastructure investments because of perceived environmental impacts associated with the natural gas supply chain.
Downstream	Relevant, always included	While we continue to reduce GHG emissions through priority pipeline replacement, energy efficiency, leak detection, and other programs, and expect to further reduce GHG emissions through increase use of renewable energy, certain groups may continue to oppose natural gas delivery and infrastructure investments because of perceived environmental impacts associated with natural gas end use.

C2.2d

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

NiSource manages climate-related risks and opportunities, in part, by executing on a long-term modernization plan that significantly reduces emissions and replaces aged infrastructure.

NiSource's largest sources of Scope 1 GHG emissions are from electric generation assets in Indiana. An Integrated Resource Plan (IRP), presented to the Indiana Utility Regulatory Commission (IURC) every two to three years, charts the company's strategy for the next 20 years for meeting the future energy needs of customers with cost-effective, reliable and sustainable supplies of electricity. The IRP process includes input from NIPSCO, third-party experts, customers and other external stakeholders. NIPSCO studies its current generating facilities, purchased power agreements, demand-side management programs, and its transmission and distribution system to see if assets will be available for customer electricity needs. Past performance, usage, cost and retirement are taken into account. NIPSCO evaluates the balance between customers' needs and existing resources to determine if extra generation is required. NIPSCO conducts a thorough evaluation of options to meeting customers' future energy needs. NIPSCO's integration analysis assimilates the demand forecast with existing owned generation, energy efficiency and self-build, supply-side alternatives. A slate of ranked options is derived seeking to provide service at the lowest reasonable cost to customers while addressing NIPSCO's objectives for the most efficient, economical, flexible and reliable resource options. To evaluate risk, NIPSCO develops a base case portfolio and performs scenario and sensitivity analyses, including climate-related scenario analysis. The base case portfolio reflects NIPSCO's current view of the future. Scenario and sensitivity analyses are performed to see how the portfolio is affected, influenced or impacted by potential changes in the future, including carbon costs.

C2.3

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

Yes

C2.3a

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

Identifier
Risk 1

Where in the value chain does the risk driver occur?
Customer

Risk type
Transition risk

Primary climate-related risk driver
Policy and legal: Increased pricing of GHG emissions

Type of financial impact
<Not Applicable>

Company- specific description
Future legislative and regulatory programs could significantly restrict emissions of GHGs or could impose a cost or tax on GHG emissions.

Time horizon
Long-term

Likelihood
Very likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure

Management method
We continue to reduce GHG emissions through priority natural gas pipeline replacement, energy efficiency, leak detection, and other programs, and expect to further reduce GHG emissions through increased use of renewable energy. We plan to retire our remaining coal-fired electric generation by 2028. We are also targeting a 50% reduction in methane emissions from natural gas main and service lines by 2025 and a 90% overall greenhouse gas emissions reduction by 2030 (from 2005 levels).

Cost of management

Comment

Identifier
Risk 2

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

Risk type
Transition risk

Primary climate-related risk driver
Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact
<Not Applicable>

Company- specific description
Existing climate-related regulation, such as the Affordable Clean Energy (ACE) rule and methane regulation in Massachusetts, are applicable to our operations. Revised or additional future GHG legislation and/or regulation related to the generation of electricity or the extraction, production, distribution, transmission, storage and end use of natural gas could materially impact our financial position, financial results and cash flows.

Time horizon
Current

Likelihood
Very likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure

Management method
We continue to reduce GHG emissions through priority natural gas pipeline replacement, energy efficiency, leak detection, and other programs, and expect to further reduce GHG emissions through increased use of renewable energy. We plan to retire our remaining coal-fired electric generation by 2028 and transition to energy from wind, solar, and battery storage. We are also

targeting a 50% reduction in methane emissions from natural gas main and service lines by 2025 and a 90% overall greenhouse gas emissions reduction by 2030 (from 2005 levels).

Cost of management

Comment

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
Other, please specify (Increasing the costs we incur in providing our products and services and impacting the demand for and consumption of our products and services)

Company- specific description
A disruption or failure of natural gas distribution systems, or within electric generation, transmission or distribution systems, in the event of a major hurricane, tornado, terrorist attack, accident or other catastrophic event could cause delays in completing sales, providing services, or performing other critical functions. We have experienced disruptions in the past from hurricanes and tornadoes and other events of this nature. The occurrence of such events could adversely affect our financial position and results of operations. In accordance with customary industry practice, we maintain insurance against some, but not all, of these risks and losses.

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure

Management method
Case studies indicate that natural gas infrastructure (e.g. underground assets) and services exhibit significant physical resilience to climate-related events. Potential climate-related impacts on our electric generation assets are partially mitigated by the transition away from using cooling water for electric generation. NIPSCO has already reduced its water withdrawal and discharge associated with electric generation by 76% and 81%, respectively, since 2005. The company is targeting 99% reductions in both metrics by 2030 through the retirement of our remaining coal-fired electric generation.

Cost of management

Comment

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: Other

Type of financial impact
Other, please specify (Increasing the costs we incur in providing products and services and impacting the demand for and consumption of our products and services (due to change in both costs and weather patterns), and affecting the economic health where NiSource operates)

Company- specific description
Rising mean temperatures have a direct impact on our operations and customers' energy usage. In general, rising mean temperatures lower natural gas demand (i.e. heating demand) and increase electric demand (i.e. cooling demand) for residential and commercial customers. Climate change may also exacerbate the risks to physical infrastructure. Such risks include heat stresses to power lines, storms that damage infrastructure, lake and sea level changes that damage the manner in which services are currently provided, droughts or other stresses on water used to supply services, and other extreme weather conditions.

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure

Management method
As part of our long-term business strategy, we're making significant investments in our infrastructure, including nearly $30 billion in identified long-term modernization and growth programs spanning 20-plus years.

Cost of management

Comment

Identifier
Risk 5

Where in the value chain does the risk driver occur?
Customer

Risk type
Transition risk

Primary climate-related risk driver
Reputation: Stigmatization of sector

Type of financial impact
<Not Applicable>

Company- specific description
Natural gas may cease to be viewed as an economically and environmentally attractive fuel, and certain groups may continue to oppose natural gas delivery and infrastructure investments because of perceived environmental impacts associated with the natural gas supply chain and end use.

Time horizon
Long-term

Likelihood
Unknown

Magnitude of impact
Unknown

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure

Management method
NiSource is targeting a 50% reduction in methane emissions from natural gas main and service lines by 2025 and a 90% overall greenhouse gas emissions reduction by 2030 (from 2005 levels). NiSource and the American Gas Association (AGA) also publicize the benefits of natural gas.

Cost of management

Comment

Identifier
Risk 6

Where in the value chain does the risk driver occur?
Customer

Risk type
Transition risk

Primary climate-related risk driver
Technology: Substitution of existing products and services with lower emissions options

Type of financial impact
<Not Applicable>

Company- specific description
We continue to research, plan for, and implement new technologies that produce electric power or reduce power consumption. These technologies include renewable energy, distributed generation, energy storage, and energy efficiency. Advances in technology and changes in laws or regulations are reducing the cost of these or other alternative methods of producing power to a level that is competitive with that of most central station power electric production or result in smaller-scale, more fuel efficient, and/or more cost effective distributed generation. This could cause power sales to decline and the value of our generating facilities to decline. Additionally, energy conservation, energy efficiency, distributed generation, and energy storage technologies and policies favoring electric heat over gas heat and other factors may reduce natural gas demand.

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure

Management method
We plan to retire our remaining coal-fired electric generation by 2028, transition to energy from wind, solar, and battery storage, and reduce overall greenhouse gas emissions by 90% by 2030 (from 2005 levels). In addition, NIPSCO currently offers a voluntary Green Power program to electric customers which allows customers to designate a portion or all of their monthly usage to come from power generated by renewable energy sources, such as wind power. NIPSCO also offers Net Metering and Feed-in Tariff programs, which allow customers to generate their own electricity from renewable energy to offset their usage or to sell back to NIPSCO. We are targeting a 50% reduction in methane emissions from natural gas main and service lines by 2025. Furthermore, renewable natural gas (RNG) is emerging as a potential energy source that helps provide a carbon-neutral or carbon-negative alternative for natural gas customers.

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

C2.4a

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

Identifier
Opp1

Where in the value chain does the opportunity occur?
Customer

Opportunity type
Energy source

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

Type of financial impact
Other, please specify (Increased demand for goods and services and lower long-term costs to customers)

Company-specific description
The use of lower emission sources of energy, supportive policy incentives, and new technologies continue to provide climate-related opportunities for the company and its customers.

Time horizon
Current

Likelihood
Very likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure

Strategy to realize opportunity
NIPSCO submitted its Integrated Resource Plan to the Indiana Utility Regulatory Commission on October 31, 2018, which evaluated demand-side and supply-side resource alternatives to reliably and cost-effectively meet NIPSCO customers' future energy requirements over the ensuing 20 years. Following the retirement of the coal-fired electric generation at Bailly Generating Station in 2018, the timeline for NIPSCO's five remaining coal-fired units is the expected retirement of Schahfer Generating Station no later than 2023, and Michigan City Generating Station by 2028. The replacement plan includes lower-cost sources of energy, including wind, solar and battery storage. NIPSCO expects this plan to save electric customers an estimated $4 billion over the long-term. An all source request for proposal provided NIPSCO insight into the most relevant prices and types of resources available to meet customer needs. In February 2019, NIPSCO announced the first phase of its plans to transition to lower-cost energy resources, with the addition of three new Indiana wind farms. The wind capacity is expected to be in operation by late 2020 and represent approximately 800 megawatts of nameplate capacity.

Cost to realize opportunity

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Type of financial impact
Other, please specify (Investment opportunities)

Company-specific description
Increased domestic supply of natural gas, combined with low cost and positive environmental attributes, will continue to provide investment opportunities through the development and expansion of low emission goods and services.

Time horizon
Current

Likelihood
Virtually certain

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure

Strategy to realize opportunity

NiSource is engaged in a robust, multiyear effort to replace existing cast iron and bare steel natural gas distribution pipe with state-of-the-art materials, such as advanced plastics and protected steel with an emphasis on modernizing our systems to enhance safety, reliability, and customer service. Replacing cast iron and bare steel pipe also reduces methane emissions. Since 2005, our methane emissions from natural gas main and service lines have decreased by 34 percent from pipe replacement, and we are targeting a 50 percent reduction by 2025. Also in 2018, nearly 800,000 customers participated in our programs for energy-efficiency upgrades, home check-ups and weatherization services, saving customers approximately $23 million on their energy bills. Specifically, our natural gas efficiency programs conserved more than 6.5 billion cubic feet of gas, reducing greenhouse gas emissions by approximately 350,000 metric tonnes. Columbia Gas of Massachusetts has converted more than 23,000 customers from high-carbon fuels to natural gas over the last ten years. Heating with natural gas directly emits 27 percent less GHG emissions than heating oil, and 16 percent less when compared with propane heat. By converting customers from high-carbon fuels to natural gas, along with energy efficiency programs and the planned replacement of the remaining cast iron and bare steel main lines by 2029, emission reductions will continue in Massachusetts over the short and medium terms.

Cost to realize opportunity

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Customer

Opportunity type
Resilience

Primary climate-related opportunity driver
Participation in renewable energy programs and adoption of energy-efficiency measures

Type of financial impact
Increased revenue through new products and services related to ensuring resiliency

Company-specific description
An increased focus on energy efficiency measures and renewable energy programs may allow the company to expand customer offerings.

Time horizon
Current

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure

Strategy to realize opportunity
The strategy to realize this opportunity is the same strategy as described in Opportunities #1 and #2. Furthermore, as the price of solar power continues to decline, opportunities to provide additional services to customers that manage decentralized energy generation along with NIPSCO's own renewable energy may become available.

Cost to realize opportunity

Comment

C2.5

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

	Impact	Description
Products and services	Impacted	As part of our long-term business strategy, we're making significant investments in our infrastructure, including nearly $30 billion in identified long-term system modernization and growth programs spanning the 20+ years. These investment opportunities have significantly reduced emissions and mitigated physical risk.
Supply chain and/or value chain	Impacted	The expanding domestic supply of natural gas, combined with its low cost and positive environmental attributes, will continue to positively impact NiSource. NiSource added 27,000 new natural gas customers (net) in 2018.
Adaptation and mitigation activities	Impacted	NiSource's modernization plan includes replacement of aged infrastructure that has resulted in reduced greenhouse gas emissions and increased reliability (strengthened energy-delivery system).
Investment in R&D	Impacted	We continue to research, plan for, and implement new technologies that produce electric power or reduce power consumption. These technologies include renewable energy, distributed generation, energy storage, and energy efficiency.
Operations	Impacted	NIPSCO is transitioning from generating and supplying electricity from predominantly coal-fired power plants to renewable energy. Coal-fired Bailly Generating Station Units 7 and 8 retired in 2018. In February 2019, NIPSCO announced the first phase of its plans to transition to lower-cost energy resources, with the addition of three new Indiana wind farms. The wind capacity is expected to be in operation by late 2020 and represent approximately 800 megawatts of nameplate capacity. As of the publication of this report, two of the three wind purchase power agreements had been approved by the Indiana Utility Regulatory Commission. Operationally, NiSource replaced 302 miles of priority natural gas pipe in 2018, which significantly reduced methane emissions.
Other, please specify	Please select	

C2.6

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

	Relevance	Description
Revenues	Impacted for some suppliers, facilities, or product lines	NiSource derives substantially all of its revenues and earnings from the operating results of rate-regulated businesses. Many of the public utility commissions that regulate these businesses recognize the methane benefits of NiSource's pipeline replacement program.
Operating costs	Impacted for some suppliers, facilities, or product lines	The NIPSCO Integrated Resource Plan to retire our remaining coal-fired power plants by 2028 and transition to renewable energy has factored into the company's financial planning process for operating costs. Also, in March 2019, after collaboration between activists, natural gas utilities, and scientists, the Massachusetts Department of Public Utilities finalized regulation that requires utilities to identify and repair large volume Grade 3 leaks, as identified using the "leak extent method."
Capital expenditures / capital allocation	Impacted	Our more than $30 billion in long-term, identified investment opportunities in regulated utility assets reduces emissions and replaces aged infrastructure.
Acquisitions and divestments	Not impacted	NiSource has neither acquired nor divested for climate-related reasons.
Access to capital	Not impacted	NiSource's access to capital has not been affected for climate-related reasons.
Assets	Impacted	Our long-term modernization plan includes replacing existing cast iron and unprotected steel natural gas distribution pipes with modern, state-of-the-art materials, such as advanced plastics and protected steel. Over the past ten years, our companies have replaced more than 3,000 miles of priority natural gas distribution pipes, which has significantly reduced emissions. NIPSCO coal-fired Bailly Generating Station Units 7 and 8 retired in 2018. We plan to retire our remaining coal-fired electric generation assets by 2028 and transition to renewable energy.
Liabilities	Not impacted	NiSource is not aware of any climate-related liabilities.
Other	Please select	

C3. Business Strategy

C3.1

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

Yes

C3.1a

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

Yes, qualitative and quantitative

C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b

(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.

Yes

C3.1c

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

In 2009, the Environmental Safety & Sustainability Committee of the Board of Directors adopted the NiSource Climate Change Policy. Our business strategy is governed by this policy which includes a commitment to engage in activities to reduce potential risks and pursue opportunities associated with policies enacted to address the climate change issue. Specifically, this means reducing our climate impacts, while at the same time encouraging our customers to reduce their energy consumption through energy efficiency and education programs. Some of our climate-related investments and initiatives include: providing energy-saving incentives for customers, procuring renewable energy resources, reducing our coal-fired electric generation capacity, and reducing methane emissions from company natural gas systems. We employ many dedicated environmental specialists with a focus on improving the environment. Our systems and programs are integrated to enable this team to track, monitor, and report progress to our stakeholders, enhancing and assuring compliance. NiSource is closely managing challenges associated with an aging infrastructure, including incorporating greenhouse gas and other environmental regulations into our planning exercises. The expanding domestic supply of natural gas, combined with its low cost and positive environmental impact will continue to influence NiSource decision making. With a large portion of NiSource's existing operations connected to the natural gas industry, an investment plan that includes approximately $30 billion in infrastructure modernization programs that help reduce emissions, multiple energy efficiency programs for our customers, and an industry-leading regulated platform, NiSource continues to plan for a carbon-constrained future.

Climate-related issues are integral to our business. As a recent example of this, NIPSCO submitted its Integrated Resource Plan (IRP) to the Indiana Utility Regulatory Commission on October 31, 2018, which evaluated demand-side and supply-side resource alternatives to reliably and cost-effectively meet NIPSCO customers' future energy requirements over the ensuing 20 years. Following the retirement of the coal-fired electric generation at Bailly Generating Station (Units 7 and 8) in 2018, the timeline for NIPSCO's five reamining coal-fired units is the expected retirement of R.M. Schahfer Generating Station (Units 14, 15, 17, and 18) no later than 2023, and Michigan City Generating Station (Unit 12) by 2028. Retiring the approximately 2,100 megawatts of coal-fired generation will significantly accelerate GHG emission reductions across the NIPSCO footprint and result in further reductiongs, both in timing and magnitude. The replacement plan includes lower-cost sources of energy, including wind, solar, and battery storage. NIPSCO expects this plan to save electric customers an estimated $4 billion over the long-term. While future GHG reduction scenarios and carbon pricing were incorporated into the IRP modeling process, they did not solely drive the decision toward renewable energy. An all source request for proposal (RFP) provided NIPSCO insight into the most relevant prices and types of resources available to meet customers needs. The RFP results speak for themselves -- opportunities for significant GHG reductions are available and cost-effective in the electric sector. In February 2019, NIPSCO announced the first phase of its plans to transition to lower-cost energy resources, with the addition of three new Indiana wind farms. The wind capacity is expected to be in operation by late 2020 and represent approximately 800 megawatts of nameplate cpacity. Implementing the plan to retire all coal generation and replace with renewable and demand-side management results in a 90 percent reduction in GHG emissions by 2030, an industry-leading step ahead of the Paris Climate Agreement.

C3.1d

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

Climate-related scenarios	Details
Other, please specify (Company-developed IRP scenarios that achieve greater percentage reductions of GHG than the Paris Climate Agreement)	In the NIPSCO IRP modeling, NIPSCO assumed three carbon price scenarios. The base scenario assumes a new federal rule or legislative action effective by the mid-2020s, the second scenario does not assume any price on carbon, and the Aggressive Environmental Regulation scenario assumes a new stricter federal rule or legislative action effective by the mid-2020s. In the Aggressive Environmental Regulation scenario, price levels are generally consistent with a 50-60% reduction in electric sector CO2 emissions relative to 2005 by the 2030s. The IRP considered the framework by Ceres and M.J. Bradley & Associates, Climate Strategy Assessments for the U.S. Electric Power Industry: Assessing Risks and Opportunities Associated with a 2-Degree Transition and the Physical Impacts of Climate Change. NIPSCO used scenario analysis to assess the potential implications of climate change and inform its strategy. The plan to transition coal generation assets to renewable energy allows the company to target a 90% reduction in greenhouse gas emissions by 2030 (from 2005 levels).

C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e

(C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e) Disclose details of your organization's low-carbon transition plan.

As part of the company's ongoing commitment to reduce GHG emissions, NiSource is targeting a 90% reduction of GHG emissions by 2030 from a 2005 baseline, and a 50% reduction in methane emissions from its gas distribution main and service line by 2025. These emission sources account for approximately 95% of NiSource's total direct GHG emissions. NiSource is on track to meet these targets, as indicated through the company's progress: a 34% reduction in methane emissions from mains and services through 2018 from 2005 levels and a 37% reduction in GHG emissions from electric generation through 2018 from 2005 levels.

The company's low-carbon transition plan is led by the announced retirement of all coal-fired electric generation by 2028, and approximately $20 billion in natural gas distribution sytem investments spanning the 20-plus years.

C4. Targets and performance

C4.1

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

C4.1a

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

Target reference number
Abs 1

Scope
Scope 1

% emissions in Scope
91

Targeted % reduction from base year
50

Base year
2005

Start year
2017

Base year emissions covered by target (metric tons CO2e)
18369782

Target year
2025

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

% of target achieved

37

Target status
Underway

Please explain
Our Abs1 target is a 50% reduction in GHG emissions from our electric generation portfolio by 2025 (from 2005 levels). In combination with our other absolute targets, 96% of our Scope 1 base year emissions are covered by our emission reduction targets. We consider this target to be a science-based target as it exceeds GHG reductions required by the 1.5 degree IPCC report (i.e., 45% reduction by 2030).

Target reference number
Abs 2

Scope
Scope 1

% emissions in Scope
5

Targeted % reduction from base year
50

Base year
2005

Start year
2017

Base year emissions covered by target (metric tons CO2e)
1046491

Target year
2025

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

% of target achieved
34

Target status
Underway

Please explain
Our Abs2 target is a 50% reduction in methane emissions from our gas distribution companies' mains and services by 2025 (from 2005 levels). In combination with our other absolute targets, 96% of our Scope 1 base year emissions are covered by our emission reduction targets. We consider this target to be a science-based target as it exceeds GHG reductions required by the 1.5 degree IPCC report (i.e., 45% reduction by 2030).

Target reference number
Abs 3

Scope
Scope 1

% emissions in Scope
91

Targeted % reduction from base year
90

Base year
2005

Start year
2018

Base year emissions covered by target (metric tons CO2e)
18369782

Target year
2030

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

% of target achieved
34

Target status
New

Please explain
Our Abs3 target is at least a 90% reduction in GHG emissions from our electric generation portfolio by 2030 (from 2005 levels). In combination with our other absolute targets, 96% of our Scope 1 base year emissions are covered by our emission reduction targets. We consider this target to be a science-based target as it exceeds GHG reductions required by the 1.5 degree IPCC report (i.e., 45% reduction by 2030) and 2-degree scenarios (i.e., 80% reduction by 2050).

Target reference number
Abs 4

Scope
Scope 1

% emissions in Scope
5

Targeted % reduction from base year
50

Base year
2005

Start year
2018

Base year emissions covered by target (metric tons CO2e)
1046491

Target year
2030

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

% of target achieved
34

Target status
New

Please explain
Our Abs4 target is at least a 50% reduction in methane emissions from our gas distribution companies' mains and services by 2030 (from 2005 levels). In combination with our other absolute targets, 96% of our Scope 1 base year emissions are covered by our emission reduction targets. We consider this target to be a science-based target as it exceeds GHG reductions required by the 1.5 degree IPCC report (i.e., 45% reduction by 2030) and 2-degree scenarios (i.e., 80% reduction by 2050).

Target reference number
Abs 5

Scope
Scope 1+2 (location-based) +3 (downstream)

% emissions in Scope

100

Targeted % reduction from base year
50

Base year
2005

Start year
2017

Base year emissions covered by target (metric tons CO2e)
21509917

Target year
2025

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

% of target achieved
56

Target status
Underway

Please explain
Our Abs5 target is a 50% reduction in GHGs from all NiSource companies and activities by 2025 (from 2005 levels). In combination with our other absolute targets, 96% of our Scope 1 base year emissions are covered by our emission reduction targets. We consider this target to be a science-based target as it exceeds GHG reductions required by the 1.5 degree IPCC report (i.e., 45% reduction by 2030).

Target reference number
Abs 6

Scope
Scope 1+2 (location-based) +3 (downstream)

% emissions in Scope
100

Targeted % reduction from base year
90

Base year
2005

Start year
2018

Base year emissions covered by target (metric tons CO2e)
21509917

Target year
2030

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

% of target achieved
31

Target status
New

Please explain
Our Abs6 target is at least a 90% reduction in GHGs from all NiSource companies and activities by 2030 (from 2005 levels). In combination with our other absolute targets, 96% of our Scope 1 base year emissions are covered by our emission reduction

targets. We consider this target to be a science-based target as it exceeds GHG reductions required by the 1.5 degree IPCC report (i.e., 45% reduction by 2030) and 2-degree scenarios (i.e., 80% reduction by 2050).

C4.2

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

C4.3

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

Yes

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	1	
To be implemented*	1	10500000
Implementation commenced*		
Implemented*	4	401431
Not to be implemented		

C4.3b

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

Initiative type

Other, please specify (Net metering and feed-in tariff programs)

Description of initiative

<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)

106619

Scope

Scope 1

Voluntary/Mandatory

Voluntary

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

0

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

Payback period

No payback

Estimated lifetime of the initiative

>30 years

Comment
NIPSCO provides opportunities for customers to generate their own electricity from renewable resources to offset their bills. The net metering program allows customers to generate up to 1 MW of their own renewable energy from solar, wind or hydroelectric sources. The power generated is reimbursed through a credit on their monthly electric bill. In addition, NIPSCO has developed a Feed-in Tariff (FIT) program which allows customers to connect up to 200 kW of solar and 1 MW of biomass generation to the NIPSCO power grid and sell the generated power back to the company. Over 596,808 MWh has been generated by renewable sources in our FIT program since 2011 (over 123,400 MWh in 2018 alone). These programs are available to encourage customers to invest in renewable energy solutions. While many utilities purchase renewable energy from their customers, most do so with the variable rates and short-term contracts which can create financing difficulties. Very few utilities offer long-term, fixed-rate purchase contracts. NIPSCO believes that its proposed long-term, fixed rate contracts will better encourage renewable energy investments. This estimated annual CO2e savings figure includes Scope 3 emissions from purchased electricity.

Initiative type
Other, please specify (Energy efficiency programs)

Description of initiative
<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)
246126

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
97996600

Payback period
No payback

Estimated lifetime of the initiative
>30 years

Comment
All NiSource companies offer energy efficiency programs and services where customers can reduce energy usage and increase the efficiency of their homes or businesses. NIPSCO's electric division provides electric efficiency programs (e.g., residential lighting, home energy audits, low income weatherization, commercial and industrial incentives, energy efficiency audits for schools, residential new construction and efficiency rebates and customized energy usage reports for residential customers). These programs resulted in gross savings of 156,828 MWh in 2018. NIPSCO's natural gas distribution division provides efficiency programs (e.g., appliance and new construction rebates, low income weatherization, elementary education, and home audit programs). These programs resulted in gross savings of 504,870 dekatherms (Dth) in 2018. The Columbia Gas natural gas distribution companies provide energy efficiency programs. These programs saved Columbia Gas customers a total of 1,578,485 Dth of natural gas. This estimated annual CO2e savings figure includes Scope 3 emissions from purchased electric electricity. The investment figure is for the current reporting year only.

Initiative type
Fugitive emissions reductions

Description of initiative
Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)
10241

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
69392

Investment required (unit currency – as specified in C0.4)
20000000000

Payback period
No payback

Estimated lifetime of the initiative
21-30 years

Comment
NiSource is engaged in a multi-year effort to replace existing natural gas distribution pipes with advanced plastic pipe and protected steel. This will improve the safety and reliability of the company's gas distribution system and reduce methane emissions associated with small leaks. As a founding member in EPA's Natural Gas STAR Methane Challenge voluntary program, we are reinforcing our commitment to infrastructure modernization through investments that improve safety and reliability while reducing emissions. We have committed to replace 1.5% of bare steel and cast iron inventory over 5 years. This includes replacing 6.5% of bare steel and cast iron pipeline inventory at Columbia Gas of Maryland and Virginia over 5 years. All NiSource utilities are represented in the commitments -- Indiana, Massachusetts, Ohio and Pennsylvania are also committed individually to best management practices associated with the Methane Challenge Program with specific targets identified for each company. These targets are publicly available at https://www.epa.gov/natural-gas-star-program/. Through the 5-year program commitment, we will continue to replace cast iron and bare steel pipe in our natural gas system. As part of planned investments, we expect to further reduce methane emissions by more than 300 mcf.

Initiative type
Process emissions reductions

Description of initiative
Changes in operations

Estimated annual CO2e savings (metric tonnes CO2e)

Scope
Scope 1

Voluntary/Mandatory
Voluntary

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

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

Payback period
No payback

Estimated lifetime of the initiative
6-10 years

Comment
NiSource is investigating using temporary mobile compression for certain transmission grade natural gas pipeline blowdowns. This technology would capture the gas that would have been vented, compress it, and pump it back into the transmission line it came from. In addition to reducing emissions, this would also have the benefit of reducing noise and odor.

Initiative type
Process emissions reductions

Description of initiative
Changes in operations

Estimated annual CO2e savings (metric tonnes CO2e)
38445

Scope
Scope 1

Voluntary/Mandatory
Voluntary

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

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

Payback period
No payback

Estimated lifetime of the initiative
21-30 years

Comment
NiSource operates a flare for certain larger transmission grade natural gas pipeline blowdowns.

Initiative type
Process emissions reductions

Description of initiative
Changes in operations

Estimated annual CO2e savings (metric tonnes CO2e)
10500000

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
133333333

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

Payback period
21-25 years

Estimated lifetime of the initiative
>30 years

Comment
NIPSCO's electric generation GHG reduction plan calls for retirement of its coal-fired electric generation by 2028 and replacement with renewable energy sources, such as wind, solar and battery storage technology. This was announced in NIPSCO's 2018 Integrated Resources Plan, and it expected to achieve over $4 billion in long-term cost savings.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	State regulatory commissions frequently issue orders mandating that utilities offer programs to help customers save money. NiSource's demand-side management (DSM) programs are regulated by these state commissions and have regular reporting requirements.
Dedicated budget for energy efficiency	NiSource companies staff DSM department and budget for the necessary resources to ensure thorough execution and reporting of DSM programs.
Dedicated budget for other emissions reduction activities	NIPSCO has staff dedicated to conducting evaluations of the electric generating system which result in recommendations and projects to improve the unit heat rates and result in lower GHG emissions.

C4.5

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

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation
Product

Description of product/Group of products
By signing up for NIPSCO's Green Power Program, customers choose to have a portion of their monthly electric usage attributed to power generated by renewable energy (e.g., wind power). NIPSCO buys renewable energy certificates (RECs) on their behalf. The incremental cost is less than $2 per month for the average home (based on a monthly electric use of 1,000 kWh) to receive 100% of its electricity from renewable sources. This added cost is passed along to participating customers without any additional markup or financial return for NIPSCO. Non-participating customers are not responsible for additional charges associated with making this program available. Residential customers may designate 25, 50 or 100 percent of their monthly electric usage to be attributed to power generated by renewable energy sources. Commercial and industrial customers have the added flexibility to designate 5 or 10 percent of their monthly usage.

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
Other, please specify (Green-e Energy certified)

% revenue from low carbon product(s) in the reporting year
0

Comment
Percent of revenue is 0.001%. For details on the Green Power Program, see https://www.nipsco.com/docs/librariesprovider11/services/renewable-energy-programs/green-power/green-power-prospective-and-historic-product-content-label.pdf.

C-EU4.6

(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.

On October 31, 2018, NIPSCO submitted its Integrated Resource Plan (IRP) to the Indiana Utility Regulatory Commission (IURC). The IRP presents short- and long-term electric generation plans in an effort to maintain affordability while providing reliable, flexible, and cleaner sources of power. The goal was to transition to the best-cost, cleanest electric supply mix available while keeping options open for the future as technologies and markets change. Analysis showed the most viable path for customers involves accelerating the retirement of a majority of NIPSCO's remaining coal-fired generation by 2023 and all coal by 2028. Replacement options point toward lower-cost renewable energy resources such as wind, solar and battery storage technology.

NiSource's Columbia Gas and NIPSCO gas distribution companies are engaged in a multi-year effort to replace existing natural gas distribution pipes with advanced plastic and protected steel pipes. This will improve the safety and reliability of the company's gas distribution system and reduce methane emissions associated with small leaks. As a founding member in EPA's natural gas STAR Methane Challenge voluntary program, we are reinforcing our commitment to infrastructure modernization through investments that improve safety and reliability while reducing emissions. We have committed to replace 1.5% of bare steel and cast iron inventory over 5 years. This includes replacing 6.5% of bare steel and cast iron pipeline inventory at Columbia Gas of Maryland and Virginia over 5 years. All NiSource utilities are represented in the commitments -- Indiana, Massachusetts, Ohio and Pennsylvania are also committed individually to best management practices associated with the Methane Challenge Program with specific targets identified for each company. These targets are publicly available at https://www.epa.gov/natural-gas-star-program/. Through the 5-year program commitment, we will continue to replace cast iron and bare steel pipe in our natural gas system. As part of planned investments, we expect to further reduce methane emissions by more than 300 mcf.

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 2005

Base year end
December 31 2005

Base year emissions (metric tons CO2e)
20190231

Comment

Scope 2 (location-based)

Base year start
January 1 2005

Base year end
December 31 2005

Base year emissions (metric tons CO2e)
65297

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.2

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

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Mandatory Greenhouse Gas Reporting Rule

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
12580801

Start date
January 1 2018

End date
December 31 2018

Comment

C6.2

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

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment
NiSource Scope 2 emissions are from electricity consumption at company facilities. NiSource calculates these indirect greenhouse gas emissions by obtaining annual electricity usage and applying an emission factor specific to the region where the electricity was consumed. NiSource obtains emission factors for each state of our operations from EPA's e-GRID database.

C6.3

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

Reporting year

Scope 2, location-based
43669

Scope 2, market-based (if applicable)
<Not Applicable>

Start date
January 1 2018

End date
December 31 2018

Comment
This is our electric consumption at company facilities across NiSource.

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

Purchased goods and services

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Capital goods

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

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

Evaluation status
Relevant, calculated

Metric tonnes CO2e
2892254

Emissions calculation methodology
NiSource subsidiary (NIPSCO) purchases electricity for delivery to its customers. This electricity is supplied by MISO, which is the local operator of the electrical transmission grid. MISO does not report greenhouse gas emissions from its electricity suppliers and has not calculated an average greenhouse gas emission factor for the electricity it supplies to NIPSCO. The mix of electrical generation types in the United States has been changing as coal fired units are taken out of service, natural gas plants are constructed and more wind power and solar power is available for purchase. Given this annual variation in generation, NiSource uses emission factors from the US EPA's eGrid database. Carbon dioxide, methane and nitrous oxide emissions per megawatt-hour of electricity produced are reported in eGrid by individual generating units, by company and also by NERC region. NIPSCO is located closest to the MRO, RFC and SERC regions given in the eGrid database. There is currently no way to track which region the electricity supplied by MISO comes from, so the NiSource purchased power emission factor was chosen to be the average of the emission factors from these three NERC regions. Each year, the eGrid database is checked to ensure that the latest eGrid emission factors are used to calculate the Scope 3 emissions in the NiSource Greenhouse Gas Inventory.

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

Explanation
NiSource Scope 3 emissions come from purchased electric power. NIPSCO has entered into two power purchase agreements (PPAs) for wind energy. The first is a 20-year PPA with Iberdola, in which NIPSCO purchases wind generation from Barton Wind (in Worth County, Iowa). The total net capacity of Barton is 50 MW. The second PPA is a 15-year PPA with Iberdola, in which NIPSCO purchases wind generation from Buffalo Ridge Wind (in Brookings County, South Dakota). The total net capacity of Buffalo Ridge is 50.4 MW. In 2018, NIPSCO purchased 266 GWh of wind energy from these two wind farms.

Upstream transportation and distribution

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Waste generated in operations

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Business travel

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Employee commuting

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Upstream leased assets

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Downstream transportation and distribution

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Processing of sold products

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Use of sold products

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
NiSource's sold products are electricity and natural gas.

Downstream leased assets

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Franchises

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Investments

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Other (upstream)

Evaluation status

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

Other (downstream)

Evaluation status

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

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
0.002468368

Metric numerator (Gross global combined Scope 1 and 2 emissions)
12624470

Metric denominator
unit total revenue

Metric denominator: Unit total
5114500000

Scope 2 figure used
Location-based

% change from previous year
0.3

Direction of change
Decreased

Reason for change
The numerator (Scope 1 and 2 emissions) increased 4.6%, while the denominator (revenue) increased 4.9%.

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	11681812	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	829758	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	49226	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	20005	IPCC Fourth Assessment Report (AR4 - 100 year)

C-EU7.1b

(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	0	0	0.88	20005	
Combustion (Electric utilities)	11561006	1135	0	11658336	Scope 1 CO2e figure includes 48,955 metric tons CO2e resulting from 164 metric tons of N2O.
Combustion (Gas utilities)	0	0	0	0	
Combustion (Other)	0	0	0	0	
Emissions not elsewhere classified	0	0	0	0	

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	12580801

C7.3

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

By business division

By activity

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Electric Generation	11630160
Electric Transmission and Distribution	28176
Natural Gas Distribution	922465

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Electric Generation	11618621
Electric Transmission and Distribution	20005
Natural Gas Distribution - Combustion	68159
Natural Gas Distribution - Fugitive/Vented	767109
Natural Gas Distribution Underground Storage - Combustion	6213
Natural Gas Distribution Underground Storage - Fugitive/Vented	24996
Natural Gas Distribution Storage - LNG/LPG	16598
Building Natural Gas	11120
Mobile Sources	47981

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization’s total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility generation activities	11618621	<Not Applicable>	
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
United States of America	43669	0	64264	0

C7.6

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

By business division

By activity

C7.6a

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

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Electric Generation	8576	0
Electric Transmission and Distribution	11073	0
Natural Gas Distribution	24019	0

C7.6c

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

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Building Electricity Consumption	43669	0

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?

Increased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption		<Not Applicable>		
Other emissions reduction activities	74576	Decreased	78.85	Retired leaky SF6-insulated switch gear
Divestment	0	Please select		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output	1062189	Increased	9.95	Increase in electric generation from previous year.
Change in methodology	425676	Decreased	34.31	For 2018 we began using emission factors from U.S. EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks (1990-2017 Inventory, published April 2019) to calculate GHG emissions from our natural gas storage and distribution operations. See https://www.epa.gov/ghgemissions/natural-gas-and-petroleum-systems-ghg-inventory-additional-information-1990-2017-ghg for details.
Change in boundary	5598	Decreased	9.27	decrease in real estate square footage led to decreased energy consumption
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

C7.9b

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

Location-based

C8. Energy

C8.1

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

More than 5% but less than or equal to 10%

C8.2

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

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

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)		36989059	36989059
Consumption of purchased or acquired electricity	<Not Applicable>		64264	64264
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>		<Not Applicable>	
Total energy consumption	<Not Applicable>		37053323	37053323

C8.2b

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

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

C8.2c

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

Fuels (excluding feedstocks)
Coal

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
29608802

MWh fuel consumed for self-generation of electricity
29608802

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
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)
Natural Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
7186688

MWh fuel consumed for self-generation of electricity
6645590

MWh fuel consumed for self-generation of heat
541098

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)
Diesel

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
92585

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
92585

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)

Jet Kerosene

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
5355

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
5355

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

Fuels (excluding feedstocks)
Motor Gasoline

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
95628

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
95628

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Comment

C8.2d

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

Coal

Emission factor
0

Unit
metric tons CO2 per million Btu

Emission factor source
CO2 CEMS

Comment
All CO2 from coal combustion is measured by CO2 CEMS. For CH4 and N2O we use emission factors from Table C-2 to Subpart C of 40 CFR Part98 (Fuel type 'Coal and Coke', 0.011 kg CH4/million Btu, 0.0016 kg N2O/million Btu)

Diesel

Emission factor
0.07396

Unit
metric tons CO2 per million Btu

Emission factor source
Table C-1 to Subpart C of 40 CFR Part 98 (Distillate Fuel Oil No. 2) (converted from kg/million Btu to metric tons per million Btu)

Comment
For CH4 and N2O we use emission factors from Table C-2 to Subpart C of 40 CFR Part98 (Fuel type 'Petroleum Products', 0.003 kg CH4/million Btu, 0.0006 kg N2O/million Btu)

Jet Kerosene

Emission factor
0.07222

Unit
metric tons CO2 per million Btu

Emission factor source
Table C-1 to Subpart C of 40 CFR Part 98 (Kerosene-Type Jet Fuel) (converted from kg/million Btu to metric tons per million Btu)

Comment
For CH4 and N2O we use emission factors from Table C-2 to Subpart C of 40 CFR Part98 (Fuel type 'Petroleum Products', 0.003 kg CH4/million Btu, 0.0006 kg N2O/million Btu)

Motor Gasoline

Emission factor
19.36

Unit
lb CO2 per gallon

Emission factor source
EPA420-F-05-001 February 2005

Comment
For CH4 and N2O we use emission factors from DOE 1605b Technical Guidelines Table 1.D.2 (January 2007)

Natural Gas

Emission factor
0.05306

Unit
metric tons CO2 per million Btu

Emission factor source
Table C-1 to Subpart C of 40 CFR Part 98 (Natural gas - Weighted U.S. Average) (converted from kg/million Btu to metric tons per million Btu)

Comment
For CH4 and N2O we use emission factors from Table C-2 to Subpart C of 40 CFR Part98 (Fuel type 'Natural Gas', 0.001 kg CH4/million Btu, 0.0001 kg N2O/million Btu)

C8.2e

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	13249216	1227507	43584	0
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C-EU8.2e

(C-EU8.2e) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

Coal – hard

Nameplate capacity (MW)
2574

Gross electricity generation (GWh)
10136

Net electricity generation (GWh)
8976

Absolute scope 1 emissions (metric tons CO2e)
10420703

Scope 1 emissions intensity (metric tons CO2e per GWh)
1161

Comment

Lignite

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Oil

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Gas

Nameplate capacity (MW)
721

Gross electricity generation (GWh)
3070

Net electricity generation (GWh)
3002

Absolute scope 1 emissions (metric tons CO2e)
1185362

Scope 1 emissions intensity (metric tons CO2e per GWh)
395

Comment

Biomass

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Waste (non-biomass)

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Nuclear

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Geothermal

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Hydroelectric

Nameplate capacity (MW)
10

Gross electricity generation (GWh)
44

Net electricity generation (GWh)
44

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Wind

Nameplate capacity (MW)
100

Gross electricity generation (GWh)
266

Net electricity generation (GWh)
266

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Wind generation is acquired through purchase power agreements.

Solar

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Other renewable

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Other non-renewable

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Total

Nameplate capacity (MW)
3405

Gross electricity generation (GWh)
13515

Net electricity generation (GWh)
12288

Absolute scope 1 emissions (metric tons CO2e)
11606065

Scope 1 emissions intensity (metric tons CO2e per GWh)
945

Comment

C8.2f

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

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

Low-carbon technology type
<Not Applicable>

Region of consumption of low-carbon electricity, heat, steam or cooling
<Not Applicable>

MWh consumed associated with low-carbon electricity, heat, steam or cooling
<Not Applicable>

Emission factor (in units of metric tons CO2e per MWh)
<Not Applicable>

Comment

C-EU8.4

(C-EU8.4) Does your electric utility organization have a transmission and distribution business?
Yes

C-EU8.4a

(C-EU8.4a) Disclose the following information about your transmission and distribution business.

Country/Region
United States of America

Voltage level
Transmission (high voltage)

Annual load (GWh)

Scope 2 emissions (basis)
Please select

Scope 2 emissions (metric tons CO2e)

Annual energy losses (% of annual load)
1.62

Length of network (km)
4619

Number of connections

Area covered (km2)

Comment

Country/Region
United States of America

Voltage level
Distribution (low voltage)

Annual load (GWh)

Scope 2 emissions (basis)
Please select

Scope 2 emissions (metric tons CO2e)

Annual energy losses (% of annual load)
1.29

Length of network (km)
17459

Number of connections

Area covered (km2)

Comment

C9. Additional metrics

C9.1

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

C-EU9.5a

(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment

C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
Other, please specify	CapEx planned for renewable electricity development			

C-CO9.6/C-EU9.6/C-OG9.6

(C-CO9.6/C-EU9.6/C-OG9.6) Disclose your investments in low-carbon research and development (R&D), equipment, products, and services.

Investment start date
January 1 2018

Investment end date
December 31 2018

Investment area
R&D

Technology area
Other, please specify (Methane detection and reduction)

Investment maturity
Applied research and development

Investment figure

Low-carbon investment percentage
Please select

Please explain
NiSource participated in a field measurement campaign to measure methane emissions from portions of our natural gas distribution system.

Investment start date
January 1 2018

Investment end date
December 31 2018

Investment area
R&D

Technology area
Other, please specify (Other energy efficiency measures in the oil and gas value chain)

Exploring the opportunities for and challenges to natural gas in a low carbon future.

Investment maturity
Basic academic/theoretical research

Investment figure

Low-carbon investment percentage
Please select

Please explain
NiSource is a member of MJ Bradley's Downstream Natural Gas Initiative (DSI). DSI is a group of leading natural gas utilities collaborating to address key technical and regulatory challenges related to the role of natural gas in a low carbon future. The Initiative is focused on opportunities for expanding natural gas end-use markets and leveraging existing infrastructure to support near- and long-term environmental and economic goals. To explore the opportunities for and challenges to natural gas in a low carbon future, DSI is concentrated on three priority topics: 1. Methane Emissions from Natural Gas Distribution Systems DSI will continue its engagement with EPA on the Methane Challenge program and GHG emissions inventories, provide updates on state and federal methane regulations, and work with diverse stakeholders on the development of technologies and strategies to better understand and limit methane leaks from the distribution system. 2. Renewable Natural Gas DSI will work to identify RNG opportunities for LDCs and address barriers to integrating RNG into natural gas distribution systems. This work will cover a number of interconnected areas, including engagement with federal and state policymakers, exploration of business models that facilitate injection of RNG into distribution systems, and RNG market development strategies. 3. Decarbonization Pathways As states begin to explore options for achieving long-term climate goals, states and NGOs have initiated pathways analyses to model the energy and economic impacts of deep decarbonization. Policies based on decarbonization analyses have the potential to significantly influence the role of natural gas in the future, including in the distribution sector. DSI will collaborate to share approaches on decarbonization, engage with outside stakeholders, including state policymakers and NGOs, and assess decarbonization pathways analyses, including identifying key questions and information gaps associated with current analyses.

C10. Verification

C10.1

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

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

C10.1a

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

Scope
Scope 1

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Y
NiSource 2018 CDP Audit - Verification Deliverables.pdf

Page/ section reference
Page 2

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Y
NiSource 2018 CDP Audit - Verification Deliverables.pdf

Page/ section reference
Page 2

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

C10.1b

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

Scope
Scope 3- at least one applicable category

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Attach the statement
Y
NiSource 2018 CDP Audit - Verification Deliverables.pdf

Page/section reference
Page 2

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, we do not verify any other climate-related information reported in our CDP disclosure

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?
Yes

C11.3a

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

Objective for implementing an internal carbon price
Navigate GHG regulations
Stakeholder expectations
Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Stress test investments
Identify and seize low-carbon opportunities
Supplier engagement

GHG Scope
Scope 1
Scope 3

Application
NIPSCO updates its Integrated Resource Plan (IRP) every 2-3 years, completed its most recent update in October 2018. Updated carbon cost estimates and timeframes were included in the 2018 IRP.

Actual price(s) used (Currency /metric ton)
56.7

Variance of price(s) used
In the IRP modeling, NIPSCO assumed three carbon price scenarios. The base case assumes a new federal rule or legislative action effective in 2026. (Carbon price of $9.90/ton in 2026 increasing to $20.40/ton in 2038.) The low case assumes a replacement Clean Power Plan rule with a focus on coal plant efficiency improvements. No specific tax or emission cap requirement would be present under such regulations. The high case assumes a stricter new federal rule or legislative action effective in 2026. Price levels are generally consistent with a 50-60% reduction in electric sector CO2 emissions relative to 2005 by the 2030s. (Carbon price of $24.60/ton in 2026 increasing to $56.70/ton in 2038.)

Type of internal carbon price
Shadow price

Impact & implication
These carbon costs are incorporated into IRP models and allow the company to assess the impact of carbon costs on future electric generation portfolios. Carbon costs drive energy efficiency and low-carbon investment, among other impacts.

C12. Engagement

C12.1

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

C12.1b

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

Type of engagement
Other, please specify (Integrated Resource Planning, Energy Efficiency, and DSM)

Details of engagement
<Not Applicable>

% of customers by number

% Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement
At NIPSCO, we are offering opportunities for customers to generate their own electricity from renewable resources to offset their bills. To support more sustainable renewable electricity generation, NIPSCO's Net Metering program allows customers to generate up to 1 MW of their own renewable energy from solar, wind or hydroelectric sources. The power generated would be reimbursed through a credit on their monthly electric bill. In addition, NIPSCO has developed a Feed-in Tariff program which allows customers to connect up to 200 kW megawatts of solar and 1 MW of biomass generation to our NIPSCO power grid and sell the generated power back to the company. NIPSCO initiated stakeholder advisory efforts for its 2018 Integrated Resource Plan in March, hosting a public meeting and launching a web page for interested stakeholders to follow the progress. Four additional public meetings followed in May, July, September and October. NIPSCO also hosted public forums to discuss specific topics arising from the IRP. In addition to posting public invitations on our IRP web page, we sent an invitation to past IRP stakeholder participants. Members of our executive leadership team and several of our subject matter experts attended each meeting to hear feedback and answer questions. Throughout the IRP process, stakeholders were also invited to meet with us on a one-on-one basis to discuss key concerns and perspectives. Each interaction provided a forum for discussion and feedback related to the many components of the IRP. Valuable discussions arose in several key areas, including environmental regulations and climate-related impacts, energy efficiency program analysis and renewable energy development. NiSource operates a number of natural gas distribution energy efficiency programs through its six distribution companies (Columbia Gas of Virginia, Columbia Gas of Ohio, Columbia Gas of Massachusetts, Columbia Gas of Pennsylvania, Columbia Gas of Maryland, and Columbia Gas of Kentucky).

Impact of engagement, including measures of success
Over 596,808 megawatt hours have been generated by renewable sources in the Feed-in Tariff program since 2011 (over 123,400 MWh hours in 2018 alone). NIPSCO's electric energy efficiency programs resulted in gross savings of 156,828 MWh in 2018. NIPSCO's gas energy efficiency programs served 243,902 customers and resulted in gross savings of 504,870 dekatherms (Dth) in 2018. Columbia Gas energy efficiency programs served 515,509 customers and resulted in gross savings of 1,578,485 Dth. Also, the feedback gathered during the NIPSCO Integrated Resource Plan stakeholder process raised valuable questions, helped us better evaluate our options and improved the final plan.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?
Direct engagement with policy makers
Trade associations
Funding research organizations

C12.3a

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify (Climate change-related legislation)	Support	NiSource has a Governmental Affairs office in Washington D.C. NiSource is also a member of numerous industry-related trade associations. NiSource promotes adoption of reasonable policies addressing climate change.	NiSource will support appropriately crafted federal legislation on climate change that (1) Recognizes that greenhouse gas reduction targets must be applicable to all sources of greenhouse gas and be realistically achievable and consistent with projected availability of commercial technology; (2) Protects against undue increases in energy costs to any particular regions or groups of consumers; and (3) Recognizes the environmental benefits of natural gas and promotes policies and practices that result in the continued efficient use of natural gas by all customers.
Energy efficiency	Support	NiSource supports reasonable and cost-effective energy efficiency policies that help our customers save energy.	NiSource will support appropriately crafted federal legislation on climate change that (1) Recognizes that greenhouse gas reduction targets must be applicable to all sources of greenhouse gas and be realistically achievable and consistent with projected availability of commercial technology; (2) Protects against undue increases in energy costs to any particular regions or groups of consumers; and (3) Recognizes the environmental benefits of natural gas and promotes policies and practices that result in the continued efficient use of natural gas by all customers.
Other, please specify (Carbon dioxide emissions regulations)	Undecided	NiSource engages with various state policymakers regarding CO2 emission regulations for existing power plants.	NiSource will support appropriately crafted federal legislation on climate change that (1) Recognizes that greenhouse gas reduction targets must be applicable to all sources of greenhouse gas and be realistically achievable and consistent with projected availability of commercial technology; (2) Protects against undue increases in energy costs to any particular regions or groups of consumers; and (3) Recognizes the environmental benefits of natural gas and promotes policies and practices that result in the continued efficient use of natural gas by all customers.
Other, please specify (Methane emission regulations)	Undecided	NiSource engages with various state policymakers regarding CH4 emission regulations for natural gas systems.	NiSource will support appropriately crafted federal legislation on climate change that (1) Recognizes that greenhouse gas reduction targets must be applicable to all sources of greenhouse gas and be realistically achievable and consistent with projected availability of commercial technology; (2) Protects against undue increases in energy costs to any particular regions or groups of consumers; and (3) Recognizes the environmental benefits of natural gas and promotes policies and practices that result in the continued efficient use of natural gas by all customers.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association
NiSource is a member of the Edison Electric Institute (EEI) and the American Gas Association (AGA).

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
EEI: "Global climate change presents one of the biggest energy and environmental policy challenges this country has ever faced. EEI member companies are committed to addressing the challenge of climate change and have undertaken a wide range of initiatives over the last 30 years to reduce, avoid or sequester GHG emissions. Policies to address climate change should seek to minimize impacts on consumers and avoid harm to U.S. industry and the economy. As of the end of 2018, electric power sector CO2 emissions had declined 27 percent from 2005 levels, driven in part by low natural gas prices, increased deployment of renewable generation and customer demands." AGA: "AGA's natural gas utility members deliver clean, abundant, affordable natural gas produced in Northern America. Because natural gas is highly efficient and emits considerably less carbon dioxide, sulfur, nitrogen or particulates when combusted than other fossil fuels, natural gas results in a smaller environmental impact than other energy sources. Supplies of natural gas are becoming even more environmentally friendly. Biogas is made from non-food sources of organic waste, such as landfill and manure. When cleaned to pipeline quality, biogas becomes Renewable Natural Gas that can be delivered to residential and commercial customers. Natural gas also provides a critical back up for intermittent sources of renewable energy, such as wind and solar. Natural gas utilities continually assess emerging technologies and methodologies to determine if existing procedures can be improved. AGA works with members and leading experts to evaluate how new federal environmental regulatory proposals could impact natural gas local distribution systems and customers. We advocate for government rules and policies that protect the environment while allowing our natural gas utility members to continue to deliver clean, affordable natural gas to customers, safely and reliably." Please see each organization's website for further information regarding their climate change positions: https://www.eei.org/ https://www.aga.org/

How have you influenced, or are you attempting to influence their position?
NiSource advocates for positions that support and align with the NiSource Climate Change Policy.

C12.3d

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

C12.3f

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

The Environmental Safety and Sustainability Committee of the Board oversees programs, performance and risks relative to environmental, safety and sustainability matters, including our Climate Change Policy. In 2009, the ESS Committee adopted the NiSource Climate Change Policy. Our direct and indirect activities that influence policy are guided by NiSource's Board-level Climate Policy. Advocacy is overseen by NiSoure's Government Affairs and Environmental Safety and Sustainability professionals who ensure that the Climate Policy is followed.

C12.4

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

Publication
In mainstream reports

Status
Complete

Attach the document
2018-integrated-annual-report.pdf

Page/Section reference
Pdf pages 10, 11, 33, 35, 126, and 148

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment
2018 Integrated Annual Report

Publication
In mainstream reports

Status
Complete

Attach the document
2018nisourcesustainabilityscorecard.pdf
2018 Supplemental Sustainability Data.pdf

Page/Section reference
Page 5 of the 2018 Sustainability Scorecard

Content elements
Emissions figures
Emission targets

Comment
2018 Sustainability Scorecard and Supplemental Sustainability Data

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Publication
In mainstream reports, incorporating the TCFD recommendations

Status
Underway – previous year attached

Attach the document
2016-nisource-greenhouse-report.pdf

Page/Section reference

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment
The NiSource 2016 Greenhouse Gas Report is attached. NiSource is currently drafting a 2018 Climate Report incorporating the 2018 TCFD recommendations.

Publication
In other regulatory filings

Status
Complete

Attach the document
2018-nipsco-irp.pdf

Page/Section reference

The NIPSCO Integrated Resource Plan submitted to the Indiana Utility Regulatory Commission on October 31, 2018, is attached. See page 103-106 and 117-118. Regulatory filings in Virginia, Maryland, and Massachusetts also discuss GHG performance, but are not attached.

Content elements
Strategy
Risks & opportunities
Emissions figures

Comment
2018 NIPSCO Integrated Resource Plan

Publication
Please select

Status
<Not Applicable>

Attach the document
<Not Applicable>

Page/Section reference
<Not Applicable>

Content elements
<Not Applicable>

Comment

C14. Signoff

C-FI

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

C14.1

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

	Job title	Corresponding job category
Row 1		Please select

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms