

Xcel Energy Inc. - Climate Change 2018

Xcel Energy opted to submit a partial, non-scored response to CDP's Climate Change questionnaire this year. We responded to those questions that maintain consistent carbon data for investor reporting purposes and describe Xcel Energy's clean energy leadership. Meanwhile, we continue to provide extensive reporting on environmental or sustainability initiatives through a variety of other reports, including those listed below:

- This year we published our first Edison Electric Institute (EEI) environmental, social, governance, and sustainability report, which is a new industry reporting template to provide information in a measurable and consistent format for investors. Both the qualitative and quantitative versions of this report are available on our Investor Relations site: <http://investors.xcelenergy.com/CustomPage/Index?KeyGenPage=431145>
- Xcel Energy also publishes an annual Corporate Responsibility Report focused on our commitment to delivering clean energy without sacrificing reliability or affordability, and our economic, environmental and social contributions. Our report is built on 24 issues related to our corporate responsibility that we have identified as important to stakeholders and our company, and can be found on our website at xcelenergy.com/CorporateResponsibility.
- Finally, we provide annual carbon emissions data through our [Energy and Carbon Emissions Reporting Summary](#), available on xcelenergy.com.

C0. Introduction

C0.1

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

Xcel Energy is a major U.S. investor-owned electricity and natural gas company with annual revenues of \$11.4 billion. Headquartered in Minneapolis, Minnesota, we provide a comprehensive portfolio of energy-related products and services to approximately 3.6 million electricity customers and 2 million natural gas customers in eight Midwestern and Western states under four wholly owned, regulated utility subsidiaries. For more than a decade, we have been recognized as a national leader in wind energy and in reducing carbon and other emissions, efforts that are paving the way to a more sustainable energy future.

As a founding member of The Climate Registry, a non-profit organization established to measure and publicly report GHG emissions, we are committed to transparency and public reporting. Xcel Energy routinely reports a wealth of information associated with the company's environmental, social and economic performance through its annual Corporate Responsibility Report, CDP questionnaires,

and filings with the Securities and Exchange Commission. In 2018, we published our first Edison Electric Institute (EEI) environmental, social, governance, and sustainability report, which is a new industry reporting template to provide information in a measurable and consistent format for investors.

We continue to manage the risk of climate change and carbon policy through a comprehensive clean energy strategy that has consistently reduced carbon emissions while continuing to provide our customers with reliable, affordable energy. Since 2005, we have reduced carbon emissions company-wide by 35 percent, a level that surpasses the goal of EPA’s original Clean Power Plan and the U.S. commitment under the Paris Agreement, many years ahead of schedule. By 2022, we expect to reduce carbon emissions 50 percent from 2005 levels –as we work to achieve an aggressive company-wide goal to reduce carbon emissions 60 percent by 2030. Beyond 2030, we expect emissions reductions to continue, assuming a supportive regulatory environment, favorable economics, advances in technology and ongoing customer support. Under our current emissions pathway, we anticipate being on pace to reduce carbon emissions at least 80 percent by 2050, a trajectory that aligns with reduction levels anticipated to limit global temperature increases to 2 degrees C above pre-industrial levels.

This report has been prepared using reasonably available data, information, emission factors, and protocols and is subject to uncertainties and variabilities associated with each item.

SAFE HARBOR STATEMENT

This material contains forward-looking statements that are subject to certain risks, uncertainties and assumptions. Such forward-looking statements include projections related to emissions reductions, changes in our generation portfolio, planned retirements, and planned capital investments and are identified in this document by the words “anticipate”, “expect”, “possible”, and similar expressions. Actual results may vary materially. Factors that could cause actual results to differ materially include, but are not limited to: general economic conditions, including the availability of credit, actions of rating agencies and their impact on capital expenditures; business conditions in the energy industry: competitive factors; unusual weather; effects of geopolitical events; including war and acts of terrorism; changes in federal or state legislation; regulation; actions of regulatory bodies; and other risk factors listed from time to time by Xcel Energy in reports filed with the SEC.

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 2017	December 31, 2017	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.

Equity share

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

Smart grids / demand response

Battery storage

Micro grids

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

Other, please specify (Owned and Purchased Power)

% emissions in Scope

96

% reduction from base year

60

Base year

2005

Base year emissions covered by target (metric tons CO₂e)

80677061

Target year

2030

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

% achieved (emissions)

35

Target status

Underway

Please explain

We are exploring the option of science-based targets, but do not have any formal plans. Our targets lay out a level of reduction that is in line with national and international targets and is roughly consistent with science-based targets. The 2030 target is among the strongest in the U.S. Power sector for 2030 and is more than double the U.S. commitment in the Paris Agreement. The carbon dioxide targets are associated with our owned and purchased electricity, which represents the portfolio of electricity delivered to our customers, and by far, is our largest source of emissions.

Target reference number

Abs 2

Scope

Other, please specify (Owned and Purchased Energy)

% emissions in Scope

96

% reduction from base year

50

Base year

2005

Base year emissions covered by target (metric tons CO₂e)

80677061

Target year

2022

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

% achieved (emissions)

35

Target status

Underway

Please explain

Current projections show this goal as part of our trajectory to achieving the 60% reductions by 2030. The carbon dioxide targets are associated with our owned and purchased electricity, which represents the portfolio of electricity delivered to our customers.

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

January 1 2005

Base year emissions (metric tons CO2e)

64392484.3

Scope 2 (location-based)**Base year start****Base year end****Base year emissions (metric tons CO2e)**

Scope 2 (market-based)

Base year start

January 1 2005

Base year end

January 1 2005

Base year emissions (metric tons CO₂e)

1025048.5

C5.2

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

The Climate Registry: Electric Power Sector (EPS) Protocol

The Climate Registry: General Reporting Protocol

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?

Row 1

Gross global Scope 1 emissions (metric tons CO₂e)

47192101.6

End-year of reporting period:

Not Applicable

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

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

Row 1

Scope 2, location-based

846253.9

Scope 2, market-based (if applicable)

257562.7

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?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

These include small de minimis sources such as: fuel for small out door yard care, cooking fuels, propane for forklifts, vehicle and office refrigerants, and refrigerants for water coolers.

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

No emissions excluded

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions excluded

Explain why the source is excluded

De minimis sources of GHG emissions which are allowed to be excluded on an industry basis by The Climate Registry's methodology.

C6.5

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

Purchased goods and services

Evaluation status

Relevant, not yet calculated

Capital goods

Evaluation status

Relevant, not yet calculated

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

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

8514268.2

Emissions calculation methodology

The Climate Registries Electric Power Sector Protocol and General Reporting Protocol

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

92

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

0

Emissions calculation methodology

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

Explanation

All significant emissions related to upstream transportation or distribution is reported in Category 3 of Scope 3.

Waste generated in operations

Evaluation status: Relevant, not yet calculated

Explanation: At this time we continue to evaluate options for collection of appropriate data and factors.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

4239

Emissions calculation methodology

WRI Transportation Tool

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

22238

Emissions calculation methodology

WRI Transportation Tool

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Explanation

Xcel Energy has no upstream leases

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

0

Explanation

All emissions related to downstream transportation of electricity (line losses) or natural gas (fugitive and direct) is reported in either Scope 1 or 2 of our GHG Inventory

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

0

Explanation

Electricity and/or Natural Gas is a final product, and this Scope 3 category is not applicable.

Use of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2

0

Explanation

Electricity and/or Natural Gas is a final product, and this Scope 3 category is not applicable.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

0

Explanation

There is no end of life emissions for our products.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

0

Explanation

Xcel Energy has limited downstream leased assets. These are treated as Capital leases.

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

0

Explanation

Xcel Energy has no franchises.

Investments

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

0

Explanation

Xcel Energy has no Investment business

Other (upstream)

Evaluation status

Not evaluated

Other (downstream)

Evaluation status

Not evaluated

C6.7

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

Yes

C6.7a

(C6.7a) Provide the emissions from biologically sequestered carbon relevant to your organization in metric tons CO2.

576748.5

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	46453951	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	406445.3	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	207080.5	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	124624.8	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.9

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

Decreased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	1545799	Decreased	3.2	Combustion generation declined by 1.5% at the same time renewable generation increased 1.6%. A reduction in Scope 2 Market based emissions based on significantly more renewable energy.

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?

Market-based

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	Please select

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

Underway but not complete for reporting year-previous statement of process attached

Type of verification or assurance

Reasonable assurance

Attach the statement

[VerificationStatements.pdf](#)

Page/ section reference

Pages 2, 5, and 9. Xcel Energy reports and verifies GHGs as three separate entities. The combined signed Verification Statement is attached. Scope 1 Equity Share, Scope 1 Operational Control, Scope 2 Market Based, and Scope 2 Location Based are all presented on the referenced pages.

Relevant standard

The Climate Registry's General Verification Protocol

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

Underway but not complete for reporting year-previous statement of process attached

Type of verification or assurance

Reasonable assurance

Attach the statement

[VerificationStatements.pdf](#)

Page/ section reference

Pages 2, 5, and 9. Xcel Energy reports and verifies GHGs as three separate entities. The combined signed Verification Statement is attached. Scope 1 Equity Share, Scope 1 Operational Control, Scope 2 Market Based, and Scope 2 Location Based are all presented on the referenced pages.

Relevant standard

The Climate Registry's General Verification Protocol

Proportion of reported emissions verified (%)

100

Scope

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Underway but not complete for reporting year-previous statement of process attached

Type of verification or assurance

Reasonable assurance

Attach the statement

[VerificationStatements.pdf](#)

Page/ section reference

Pages 2, 5, and 9. Xcel Energy reports and verifies GHGs as three separate entities. The combined signed Verification Statement is attached. Scope 1 Equity Share, Scope 1 Operational Control, Scope 2 Market Based, and Scope 2 Location Based are all presented on the referenced pages.

Relevant standard

The Climate Registry's General Verification Protocol

Proportion of reported emissions verified (%)

100

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

GHG Scope

Scope 1

Scope 3

Application

We apply both CO2 regulatory and CO2 externality prices in our Upper Midwest resource planning, per Minnesota statutes.

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

25

Variance of price(s) used

\$5 to \$25 per short ton, applied beginning in 2025, for regulatory prices. \$9.09 to \$42.76 per short ton, escalating over time based on Social Cost of Carbon, for externality pricing.

Type of internal carbon price

Shadow price
Implicit price

Impact & implication

In resource planning, these CO2 prices affect the Present Value of Societal Cost (PVSC) ranking of different possible resource plans and resource acquisitions. A plan with more renewable and nuclear resources would have a lower PVSC, all else equal, than a plan with more fossil resources. The CO2 prices help internalize the cost of CO2 emissions, and guide our investments to take into account both the prospect of actual CO2 regulatory costs (in the case of the CO2 regulatory range) and climate change impacts (in the case of the CO2 externality range).

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

GHG Scope

Scope 1
Scope 3

Application

We apply CO2 regulatory prices in our Colorado Electric Resource Plans, per Colorado PUC rules, and in the latest Electric Resource Plans, were also ordered to run a sensitivity using one of the Social Cost of Carbon values.

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

20

Variance of price(s) used

\$2 to \$20 per short ton for CO2 regulatory prices; \$42 per short ton, reflecting 2020 Social Cost of Carbon at 3% discount rate, for externality value.

Type of internal carbon price

Shadow price

Implicit price

Impact & implication

In resource planning, these CO2 prices affect the selection of different possible resource plans and resource acquisitions. A plan with more renewable resources would rank better, all else equal, than a plan with more fossil resources. The CO2 prices help internalize the cost of CO2 emissions, and guide our investments to take into account both the prospect of actual CO2 regulatory costs (in the case of the CO2 regulatory range) and climate change damages (in the case of the CO2 externality price).

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

GHG Scope

Scope 1

Scope 3

Application

We apply CO2 regulatory prices in our New Mexico resource plans, per New Mexico PSC rules.

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

20

Variance of price(s) used

Carbon price sensitivities at \$8, \$20, and \$40 per short ton

Type of internal carbon price

Shadow price

Implicit price

Impact & implication

In resource planning, these CO2 prices affect the selection of different possible resource plans and resource acquisitions. A plan with more renewable resources would rank better, all else equal, than a plan with more fossil resources. The CO2 prices help internalize the cost of CO2 emissions, and guide our investments to take into account the prospect of actual CO2 regulatory costs in the future.

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.

- This year we published our first Edison Electric Institute (EEI) environmental, social, governance, and sustainability report, which is a new industry reporting template to provide information in a measurable and consistent format for investors. Both the qualitative and quantitative versions of this report are available on our Investor Relations site:
<http://investors.xcelenergy.com/CustomPage/Index?KeyGenPage=431145>
- Xcel Energy also publishes an annual Corporate Responsibility Report focused on our commitment to delivering clean energy without sacrificing reliability or affordability, and our economic, environmental and social contributions. Our report is built on 24 issues related to our corporate responsibility that we have identified as important to stakeholders and our company, and can be found on our website at xcelenergy.com/CorporateResponsibility.
- Finally, we provide annual carbon emissions data through our [Energy and Carbon Emissions Reporting Summary](#), available on xcelenergy.com.

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	Frank Prager - Vice President, Policy and Federal Affairs	President

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 state the main reason why you are declining to respond to your Customers

Prefer to work directly with customer, not through a third party