

Welcome to your CDP Climate Change Questionnaire 2021

C0. Introduction

C0.1

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

Ameren Corporation, headquartered in St. Louis, MO, is a public utility holding company with annual revenues of more than \$5.79 billion and the parent company of Ameren Illinois Company (AIC), Union Electric Company, doing business as Ameren Missouri (AMO) and Ameren Transmission Company of Illinois (ATXI). Ameren serves approximately 2.4 million electric and more than 900,000 natural gas customers across 64,000 square miles in Illinois and Missouri. Ameren's net generating capacity, all of which is owned by AMO, was approximately 10,500 MWs as of 12/31/20. In 2020, AMO's energy supply was approximately 67% from coal, 19% from nuclear, 5% from hydro, 1% from methane gas and solar, 1% from purchased wind, 1% from natural gas and 7% from purchased power.

AMO operates a rate-regulated electric generation, transmission and distribution business and a rate-regulated natural gas distribution business in Missouri. AIC operates rate-regulated electric transmission, electric distribution, and natural gas distribution businesses in Illinois. ATXI operates a rate-regulated electric transmission business.

In May 2021, we released the 2021 Ameren Sustainability Report (available at [Ameren.com/Sustainability](https://www.ameren.com/Sustainability)), which offers a comprehensive view of our actions on key environmental, social and governance (ESG) matters. Ameren also participates in a voluntary industry initiative coordinated by the Edison Electric Institute (EEI) and the American Gas Association (AGA) to provide electric and gas industry investors with uniform and consistent ESG and sustainability-related metrics. The EEI AGA ESG/sustainability reporting template, along with other reports, are available under the ESG section of [AmerenInvestors.com](https://www.AmerenInvestors.com).

Ameren's 2020 year end rate base consisted of approximately 75% from electric and natural gas distribution investments, 11% coal generation, 7% nuclear generation, 2% gas generation, and 5% renewable generation. These percentages reflect strategic allocation of increasing amounts of capital to distribution and transmission businesses and Ameren's view that the energy grid will be increasingly important and valuable to its customers, the communities it serves and its shareholders. This increasing value of the grid is expected to be driven by the

need for a smarter, more hardened energy delivery system to incorporate increasingly more distributed and renewable generation sources. Ameren expects the percentage of its rate base represented by coal fuel-fired generation investments to decline in the years ahead as it focuses on increased grid and renewable generation investment.

Ameren's strategy for addressing climate risk is largely embedded in AMO's Integrated Resource Plan (IRP). The current IRP, issued in September 2020, outlined plans to significantly increase AMO's renewable energy portfolio, including the planned retirement of all of AMO's coal-fired generation capacity over the next 20 years, with the retirement of the Meramec Energy Center by the end of 2022 and all coal-fired generation by 2042 and the addition of at least 5,400 MWs of renewable generation by 2040. We acquired a 400 MW and a 300 MW wind generation facility substantially in-service in December 2020 and June 2021, respectively. Ameren has a goal to reduce CO2 emissions 50% by 2030, 85% by 2040 and Net-Zero by 2050, as compared to 2005 levels. More information is available at AmerenMissouri.com/IRP.

FORWARD-LOOKING STATEMENTS. Statements in this report not based on historical facts are considered "forward-looking" and, accordingly, involve risks and uncertainties that could cause actual results to differ materially from those discussed. Although such forward-looking statements have been made in good faith and are based on reasonable assumptions, there is no assurance that the expected results will be achieved. These statements include (without limitation) statements as to future expectations, beliefs, plans, projections, strategies, targets, estimates, objectives, events, conditions, and financial performance. We are providing this cautionary statement to identify important factors that could cause actual results to differ materially from those anticipated. We refer you to our Annual Report on Form 10-K for the year ended December 31, 2020, and our other reports filed with the Securities and Exchange Commission, which contain a list of factors and a discussion of risks that could cause actual results to differ materially from management expectations suggested in such forward-looking statements. Except to the extent required by the federal securities laws, we undertake no obligation to update or revise publicly any forward-looking statements to reflect new information or future events.

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
Reporting year	January 1, 2020	December 31, 2020	Yes	1 year

C0.3

(C0.3) Select the countries/areas 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 chosen approach for consolidating your GHG 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

Smart grids / demand response

Micro grids

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
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Board-level committee	<p>Working closely with the Nuclear, Operations and Environmental Sustainability Committee (NOESC), the full Board of Directors oversees environmental matters as they relate to policy and strategy, including those related to planning for the potential implications of climate-related risks. The Board routinely considers environmental issues (including climate issues) and assesses how they impact the Company's operations, strategies and risk profile. The Company's directors engage in vigorous discussions regarding these issues in which they express and consider diverse points of view. The Board has a diverse range of skills that make it well-positioned to address the risks and opportunities associated with environmental issues. These include extensive energy industry, operational, strategic planning, financial, cyber, and regulatory experience, as well as environmental, sustainability and legal expertise.</p> <p>The NOESC to oversees and reviews the Company's operations, including safety, performance, environmental and compliance issues, and risks, policies and performance related to environmental sustainability matters, including those related to climate change and water resource management. Senior management updates the NOESC on all aspects of the Company's operations throughout the year, including long-term generation planning, compliance with environmental regulations and environmental sustainability matters.</p> <p>Case Study: Net-Zero Target (Situation) We recognize climate change is a critical issue for our customers and stakeholders. (Task) An internal working group proposed a path to achieve net-zero carbon emissions. (Action) In September 2020, Ameren established a goal of achieving net-zero carbon emissions by 2050. Ameren is also targeting a 50% CO₂ emissions reduction by 2030 and an 85% reduction by 2040 base on 2005 levels. Our net-zero carbon emissions goal is consistent with the objectives of the Paris Agreement and limiting global temperature rise to 1.5 degree Celsius. The carbon emissions reductions were discussed with the Board of Directors. (Result) The report is available publicly at Ameren.com/sustainability.</p>
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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	<p>Reviewing and guiding strategy</p> <p>Reviewing and guiding major plans of action</p>	The Nuclear, Operations and Environmental Sustainability Committee (NOESC) oversees and reviews the Company's operations, including safety, performance, environmental and compliance issues, and risks, policies and performance related to environmental

<p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding annual budgets</p> <p>Reviewing and guiding business plans</p> <p>Setting performance objectives</p> <p>Monitoring implementation and performance of objectives</p> <p>Overseeing major capital expenditures, acquisitions and divestitures</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<p>sustainability matters, including those related to climate change and water resource management. Senior management updates the NOESC on all aspects of the Company's operations throughout the year, including long-term generation planning, compliance with environmental regulations and environmental sustainability matters.</p> <p>The Audit and Risk Committee oversees the Company's enterprise risk management program, which includes strategic, operational and cybersecurity risks, as well as the processes, guidelines, and policies for identifying, assessing, monitoring, and mitigating such risks, which include climate-related risks.</p> <p>The Nominating and Corporate Governance Committee oversees the Company's corporate governance, which includes the Company's proxy statements, shareholder proposals, the Company's responses to shareholder proposals and any reports the Company issues in response to shareholder proposals.</p> <p>The Finance Committee oversees and reviews major capital projects, including projects related to environmental (climate) compliance.</p> <p>Case Study: Net-Zero Target (Situation) We recognize climate change is a critical issue for our customers and stakeholders. (Task) An internal working group proposed a path to achieve net-zero carbon emissions. (Action) In September 2020, Ameren established a goal of achieving net-zero carbon emissions by 2050. Ameren is also targeting a 50% CO2 emissions reduction by 2030 and an 85% reduction by 2040 base on 2005 levels. Our net-zero carbon emissions goal is consistent with the objectives of the Paris Agreement and limiting global temperature rise to 1.5 degree Celsius. The carbon emissions reductions were discussed with the Board of Directors. (Result) The report is available publicly at Ameren.com/sustainability.</p>
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C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly

C1.2a

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

The CEO is the highest position responsible for climate-related issues at Ameren. We have several other officers who are responsible for climate-related issues, including (i) Senior Vice President – Innovation & Corporate Strategy, who reports to the Executive Vice President & Chief Financial Officer (CFO); (ii) Senior Vice President – Finance & Chief Accounting Officer, who reports to the Executive Vice President & CFO; (iii) Senior Vice President - General Counsel & Secretary, who reports directly to the CEO and (iv) Business Unit Presidents, who report directly to the CEO. Our CFO also reports directly to our CEO. Our strategy and actions are subject to stringent governance requirements.

In 2018, Ameren created the Corporate Social Responsibility (CSR) department to lead efforts on environmental, social, and governance (ESG) matters, climate-related issues and shareholder advocacy efforts. Additionally in 2018, Ameren created a CSR Executive Steering Committee to lead Ameren's enterprise-wide social responsibility efforts including providing input to our CSR strategy and advocating for a culture of sustainability among co-workers and suppliers. In 2019, Ameren further emphasized the importance of managing ESG and climate-related issues by establishing a Vice President-Sustainability & Electrification that reports directly to the Senior Vice President-Strategy, Innovation, and Sustainability & Risk. The Vice President-Sustainability & Electrification guides climate-related corporate strategy by working closely with leadership, management teams and subject matter experts, including an internal climate policy core team. The core team was created in 2019 to help guide climate-related corporate strategy and review potential climate policy and U.S. legislation. Team findings are regularly shared with corporate executive and in management briefings.

We have a robust enterprise risk management (ERM) and governance programs to identify, evaluate and manage risks. Our ERM program is a comprehensive, consistently applied management framework that captures all climate-related policy and related risks. Risks are evaluated using criteria associated with financial and qualitative impacts and probability associated with the likelihood of impact. Risk management is embedded into the business processes and key decision making at appropriate levels of the Company. A variety of management teams throughout our organization plan and execute our risk strategy, as well as coordinate with internal and external subject matter experts to inform the Board and company leadership of specific issues. These teams include, but are not limited to: environmental,

innovation, legislative and regulatory affairs, corporate planning, engineering and generation, transmission, distribution and gas operations. Most of these teams report to the officers with responsibilities for climate-related issues (e.g., CSR, environmental, innovation, and corporate planning teams report to the SVP of Strategy, Innovation, and Sustainability & Risk). In addition, our Board of Directors has extensive oversight over our strategy, execution and all key risks, including key climate risks.

In May 2021, Ameren published a climate report titled "Committed to Clean: Transformational Changes Toward Net-Zero." The report is based on recommendations from the Task Force on Climate-related Financial Disclosures. This report provides information about the Company's management of climate-related risks and opportunities, including Ameren Missouri's expansive plan to add 5,400 MW of clean energy in the coming decades. It also details how that plan is consistent with meeting the 1.5° Celsius goal, the target established by the Paris Agreement. It also describes the comprehensive steps Ameren is taking to meet its obligation to provide safe, reliable and affordable energy in an environmentally responsible manner to its customers and the communities it serves while effectively balancing climate-related risks. This report leveraged the results of our participation in the Electric Power Research Institute's study regarding utility industry scenario analyses with respect to climate change. The report was prepared by a cross-functional group of subject matter experts from across the Company, including representatives from our communications, corporate planning, corporate social responsibility, environmental, finance, legal, electric and gas operations, and strategy and innovation departments and outside advisors. Members of Ameren's Executive Leadership Team oversaw and provided guidance on the report's preparation. The report was reviewed by the Board of Directors, as well as Nuclear, Operations, and Environmental Sustainability Committee of our Board of Directors.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Incentives are provided for the management of climate-related issues.

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).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Energy manager	Monetary reward	Efficiency target	Co-workers in Ameren Illinois, co-workers in the Ameren Missouri Community Economic Development and Energy Solutions area, and co-workers in Ameren Services are eligible for annual monetary incentive compensation

			<p>related to energy-efficiency as follows:</p> <p>Ameren Illinois: Achievement of mwh savings associated with energy-efficiency programs, low/moderate income energy-efficiency programs and weatherization of single-family homes.</p> <p>Ameren Missouri Community and Economic Development & Energy Solutions: Achievement of mwh performance associated with energy-efficiency programs.</p> <p>Ameren Services co-workers (all except officers): Achievement of mwh savings and performance associated with energy-efficiency programs, low/moderate income energy-efficiency programs and weatherization of single-family homes through the Ameren Illinois and Ameren Missouri programs.</p>
Corporate executive team	Monetary reward	Emissions reduction project	<p>In 2020, Ameren added a 'clean energy transition' metric to its long-term incentive program. The metric is based on renewable generation and energy storage additions (in terms of megawatts) over a three-year performance period. Effective in 2021, the clean energy transition metric was enhanced to also include the mw associated with the retirement of its coal fired energy centers over the three year performance period. The clean energy transition metric is tied to 10% of the total annual equity grant under the long-term incentive program. This metric applies to the entire Ameren Leadership Team (ALT), including the corporate executive team and Chief Executive Officer. This change is aligned with Ameren's commitment to strong environmental stewardship and executing a balanced and flexible generation strategy.</p>

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	5	Short-term: From 0 to 5 years
Medium-term	5	10	Medium-term: From 5 to 10 years
Long-term	10	30	Long-term: From 10 to equal to or greater than 30 years

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Oversight, accountability and risk management are important elements of an effective strategy for identifying and assessing climate-related risks. We have established robust risk management and governance systems to identify, evaluate and manage short (from 0 to 5 years), medium (from 5 to 10 years), and long-term (from 10 to 30 years and beyond) climate-related risks, including risks related to regulatory changes, changes in customer behavior, reputation, and weather.. The Audit and Risk Committee (ARC) of Ameren's Board of Directors oversees our enterprise risk management (ERM) program. Ameren's ARC meets at least five times per year. The ARC relies on management through the Executive Leadership Team (ELT) to manage and report risks across the corporation. The ELT formed the Risk Management Steering Committee (RMSC) to oversee risk management and the ERM process. The RMSC is chaired by the CFO and comprised of eight senior executives, including the four segment presidents, and meets monthly throughout the year. The goals of the ERM program are to enhance the ERM structure, further enable cross segment risk portfolio management, create solid ties to emergent risks, and incorporate detailed analysis of topical areas including environmental. The ERM program assists management in identifying, assessing, and managing risks and supports management in risk-based decision making, enabling achievement of corporate objectives in a manner consistent with Ameren's overall risk tolerance. Each enterprise risk has an internal owner who periodically reviews and updates that risk and risk mitigation plan. Risks and opportunities are assessed using a consistent risk framework and methodology. Risk level assessments are performed within the business on a consistent schedule and are based on a combination of both quantitative and qualitative metrics and consider the impacts and the probability associated with the likelihood of those impacts. The quantitative metrics include financial impacts such as capital expenditures, O&M costs, and Earnings per Share. Qualitative impacts include: Brand Reputation, Legal and Regulatory, People, Safety, Vulnerability and Velocity. Once risks are assessed, action plans to mitigate risks are discussed, approved and monitored. Subject matter experts evaluate potential regulatory, physical, financial and reputational risks/opportunities that could have a financial impact greater than \$1M or other qualitative impacts on the company or an asset (e.g., potential substantive financial impact).

All function and segment risks are aggregated based on the corporate Risk Heat Map categories. Each category is assessed and determined to be a high, medium, or low risk. The overall risk assessment of each risk category is discussed with the Ameren Executive Leadership Team (ELT), and reviewed and approved by the RMSC at least annually and risk categories within the Heat Map that are considered high or medium risks are discussed with the

full Board of Directors or a Board committee each year. This process helps senior management identify risks/opportunities, mitigation strategies and potential financial implications. Recommendations are communicated to the appropriate functions, business segments and the Ameren Executive Leadership Team, as necessary.

In addition to the ERM program, Ameren management reports regularly on environmental compliance matters to the Nuclear, Operations and Environmental Sustainability Committee of Ameren's Board of Directors. Working closely with the Nuclear, Operations and Environmental Sustainability Committee, the full Board of Directors oversees environmental matters as they relate to policy and strategy, including those related to planning for the potential implications of climate-related risks.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

Oversight, accountability and risk management are important elements of an effective strategy for identifying and assessing climate-related risks. We have established robust risk management and governance systems to identify, evaluate and manage short (from 0 to 5 years), medium (from 5 to 10 years), and long-term (from 10 to 30 years and beyond) climate-related risks, including risks related to regulatory changes, changes in customer behavior, reputation, and weather.. The Audit and Risk Committee (ARC) of Ameren's Board of Directors oversees our enterprise risk management (ERM) program. Ameren's ARC meets at least five times per year. The ARC relies on management through the Executive Leadership Team (ELT) to manage and report risks across the corporation. The ELT formed the Risk Management Steering Committee (RMSC) to oversee risk management and the ERM process. The RMSC is chaired by the CFO and comprised of eight senior executives, including the four segment presidents, and meets monthly throughout the year. The goals of the ERM program are to enhance the ERM structure, further enable cross segment risk portfolio management, create solid ties to

emergent risks, and incorporate detailed analysis of topical areas including environmental. The ERM program assists management in identifying, assessing, and managing risks and supports management in risk-based decision making, enabling achievement of corporate objectives in a manner consistent with Ameren's overall risk tolerance.

Risks and opportunities are assessed using a consistent risk framework and methodology. Risk level assessments are performed within the business on a consistent schedule and are based on a combination of both quantitative and qualitative metrics and consider the impacts and the probability associated with the likelihood of those impacts. The quantitative metrics include financial impacts such as capital expenditures, O&M costs, and Earnings per Share. Qualitative impacts include: Brand Reputation, Legal and Regulatory, People, Safety, Vulnerability and Velocity. Once risks are assessed, action plans to mitigate risks are discussed, approved and monitored. Subject matter experts evaluate potential regulatory, physical, financial and reputational risks/opportunities that could have a financial impact greater than \$1M or other qualitative impacts on the company or an asset (e.g., potential substantive financial impact). Each enterprise risk has an internal owner who periodically reviews and updates that risk and risk mitigation plan.

In addition to the ERM program, Ameren management reports regularly on environmental compliance matters to the Nuclear, Operations and Environmental Sustainability Committee of Ameren's Board of Directors. Working closely with the Nuclear, Operations and Environmental Sustainability Committee, the full Board of Directors oversees environmental matters as they relate to policy and strategy, including those related to planning for the potential implications of climate-related risks.

The Corporate Social Responsibility (CSR) department to lead efforts on ESG, climate-related issues and shareholder advocacy efforts. Our CSR Executive Steering Committee leads Ameren's enterprise-wide social responsibility efforts, including providing input to our CSR strategy. In 2019, Ameren further emphasized the importance of managing ESG and climate-related issues by establishing a Vice President-Sustainability & Electrification.

An example of how transitional climate-related risks and opportunities are managed at Ameren is demonstrated through the development of the 2020 Ameren Missouri Integrated Resource Plan (IRP). The 2020 IRP is designed to ensure that customers' long-term energy needs are met in a reliable, cost-effective and environmentally responsible manner. In September 2020, Ameren Missouri filed its 2020 IRP with the Missouri Public Service Commission ("MoPSC"), which targets cleaner and more diverse sources of energy generation, including solar, wind, hydro, and nuclear power, and supports increased investment in new energy technologies. The plan, which is subject to review by the MoPSC, also includes expanding renewable sources by adding 3,100 MW of renewable generation by the end of 2030 and a total of 5,400 MW of renewable generation by 2040. These amounts include the 400 MW wind generation facility that Ameren Missouri acquired in December 2020 and a 300 MW wind

generation facility that Ameren Missouri acquired in January 2021 and which is expected to be completed later in 2021. Ameren's company-wide goal of reducing CO2 emissions by 50% by 2030, 85% by 2040, and net-zero by 2050 from 2005 levels.

(Situation) We recognize climate change is a critical issue for our customers and stakeholders. (Task) An example of how physical risks are mitigated is provided in our "Committed to Clean: Transformational Changes Toward Net-Zero" report issued in May 2021 which identifies the climate-related risks that affect the company: policy and legal, physical, reputational, technology, market and financial. Within each risk, we identify key mitigation strategies. (Action) Our strategy to address physical risk includes system hardening, emergency planning, situational awareness and emergency response. (Result)

- System Hardening: Enhancements that improve reliability and protect against a changing climate include burying lines most susceptible to weather-related damage.
- Emergency Planning: Ameren stores spare power transformers, switchgear units, and other substation-related equipment at strategic locations across our service territory. Regional preparedness measures include the MISO transmission scenario planning process, membership in the Midwest Mutual Assurance Group (a consortium of electric utilities that provide emergency support for one another in events following extreme weather events).
- Situational Awareness: Ameren's monitoring and forecasting of disruptive events included the formation of a Watch Center and incorporation of real-time weather prediction information.
- Emergency Response: In addition to proactive measures, Ameren utilizes an Incident Command and Control structure for emergency management, which enables a coordinated emergency response to a disruptive event.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Ameren has a corporate process for identifying significant risks and opportunities that allow its businesses to make prudent decisions while meeting our customers' energy needs in a safe, reliable, efficient and environmentally responsible manner, including consideration of climate-related risks. Ameren develops action plans that mitigate risk, manage long-term customer costs and create shareholder value. Operating an electric utility is a highly regulated activity. Current and emerging regulations, including those related to climate change are systematically analyzed. For example, although we believe our 2020 Ameren Missouri Integrated Resource Plan (IRP) has flexibility to comply with new laws and regulations, changes to environmental laws

		<p>and regulations could increase costs to customers, impact reliability. As a result of the IRP, we further believe we are effectively mitigating policy and legal risks associated with climate-related activities.</p> <p>As of December 31, 2020, Ameren Missouri's coal -fired energy centers represented 11% of Ameren's rate base. Our five year plan (2021-2025) to invest \$17.1 billion directs significant investments to transmission and distribution systems and renewable generation. Investments in transmission and distribution allow systems to be more efficient and provide access to renewable resources. The following initiatives are part of our plan: energy efficiency programs; optimizing energy center operations; evaluating the potential retirement of existing coal-fired generation and new low/ zero-emitting generation; and acquiring hybrid bucket trucks, natural gas fuel trucks and electric vehicles. Ameren Illinois joined with energy stakeholders in supporting the Future Energy Jobs Act (FEJA), which was signed into law. FEJA extended the state's landmark Illinois Energy Infrastructure Modernization Act and gives Ameren Illinois the ability to continue modernizing its electric distribution system while seeking recovery under a formula ratemaking process.</p>
Emerging regulation	Relevant, always included	<p>Current and future policies at the federal, state and local level could have a significant impact on the electric power industry, our business, our customers, the communities we serve and our shareholders. In addition to complying with existing laws and regulations, Ameren actively engages with key stakeholders and monitors and reviews applicable policies for potential impacts to our current and future operational analysis and decision making. The changing nature of international efforts and domestic rules and regulations highlights the uncertainties we face, particularly climate energy policies.</p> <p>Changes in energy policies and regulations could require adjustments to our generation transition plan to accelerate or increase carbon emissions reductions. Under our regulatory frameworks, prudent actions taken to comply with laws and regulations are recoverable in customer rates. In addition, while our current generation transition plan has flexibility to comply with new laws and regulations, changes to environmental laws and regulations could increase costs to customers, impact reliability, and in some instances, negatively impact our revenues or ability to fully recover our costs and earn fair returns on our investments. We will continue to advocate for responsible energy policies and regulations (including environmental policies and regulations) that effectively balance environmental stewardship with customer costs and reliability.</p>

Technology	Relevant, always included	<p>The design, implementation, and management of several programs associated with reduction of climate-related risk (e.g., energy efficiency programs, and smart grid programs) create performance and technology risks, including risks that programs do not deliver expected performance (energy savings or improved reliability results) or technological results which may affect Ameren's ability to recover costs through regulatory proceedings and may also negatively affect customers' perception of energy efficiency programs. In addition, new technologies that may emerge as a result of increased focus on GHG reduction technologies could change the use of natural gas and electricity. Improvements in technologies, such as plug-in electric vehicles and fuel cells, may increase demand for these products and provide additional stress on Ameren's delivery system. These demands could require development of additional transmission and distribution systems. These and other technologies could also affect natural gas and electric sales.</p> <p>Ameren addresses these risks by designing programs that contain a mix of initiatives to avoid over-reliance on any one approach, technology or market. This mix includes different services, delivery mechanisms, and incentive types/levels. In 2010, Ameren created the Technology Point of View Team to address technology expected to have significant future impact on our business. This team offered a framework for evaluating and monitoring potential "game-changing" technologies. In 2015, Ameren's Innovative Technologies initiative was established to advance innovative technologies and related impacts on customer loyalty, regulatory/policy frameworks, and economic opportunities with a view 15 years into the future. The teams assess various technologies and recommend action plans to create successful change. The initiative's efforts complement other related innovation activities occurring across Ameren.</p>
Legal	Relevant, always included	<p>Current and future policies at the federal, state, or local level could have a significant impact on the electric power industry, our business, our customers, the communities we serve and our shareholders. In addition to complying with existing laws and regulations, Ameren actively engages with key stakeholders and monitors and reviews applicable policies for potential impacts to our current and future operational analysis and decision making. The changing nature of international efforts and domestic rules and regulations, such as those outlined below, highlights the uncertainties we face around energy policy, particularly climate energy policies.</p> <p>Changes in energy policies and regulations could require adjustments to our generation transition plan to accelerate or increase carbon emissions reductions. Under our regulatory frameworks, prudent</p>

		<p>actions taken to comply with laws and regulations are recoverable in customer rates. In addition, while our current generation transition plan has flexibility to comply with new laws and regulations, changes to environmental laws and regulations could increase costs to customers, impact reliability, and in some instances, negatively impact our revenues or ability to fully recover our costs and earn fair returns on our investments. We will continue to advocate for responsible energy policies and regulations (including environmental policies and regulations) that effectively balance environmental stewardship with customer costs and reliability. For additional information and further discussion, refer to Ameren's 10-K Report and its other filings with the Securities and Exchange Commission.</p> <p>The EPA's Affordable Clean Energy (ACE) Rule repealed an earlier regulation, the Clean Power Plan, and replaced it with a new rule that established emission guidelines for states to follow in developing plans to limit CO2 emissions and identified certain efficiency measures as the best system of emission reduction for coal-fired electric generating units. In January 2021, the United States Court of Appeals for the District of Columbia Circuit vacated the ACE Rule and states are no longer obligated to develop plans implementing ACE. Additional litigation is possible. Regardless of the outcome of such potential legal challenges, the EPA is likely to develop new regulations to address carbon emissions from coal and natural gas electric generating units, although, as discussed above, the timing of any such regulations is uncertain.</p>
Market	Relevant, always included	<p>If market prices do not reflect increased costs associated with needed investments, Ameren Missouri may sell less energy in the market. However, because Ameren Missouri is a regulated utility it is allowed to request changes in its rate structure as market conditions fluctuate. Other risks to consider include investor uncertainty, which could have financial implications for both the company and for customers.</p> <p>Ameren is committed to its role as a leader in providing a secure energy future for our customers. It is imperative that future business plans continue to be prudent and in the best interest of our customers. There is a risk that customer satisfaction levels will decrease as a result of higher rates due to increased costs associated with actions taken to address climate change. Ameren is taking steps to reduce the risks related to poor recovery mechanisms and customer bad debt expense. Ameren's risk management department has policies to address fuel price volatility. As climate legislation/regulation is finalized, Ameren's risk management department will review those policies to ensure they will be sufficient to address any fuel price volatility that may arise. Robust policies and processes exist to allow Ameren management to</p>

		review and approve each offset or allowance financial hedge that may be executed. Caps or limits on specific transactions may be implemented to diversify the portfolio of hedges to minimize the negative financial impact associated with any single hedge or offset project.
Reputation	Relevant, always included	<p>We manage our business in a sustainable fashion, balancing the needs of the customers and communities we serve, our co-workers, the environment and our shareholders. Being mindful of potentially differing priorities among our stakeholders, we spend significant effort analyzing strategic and operational options. We consider variables such as energy and environmental regulation, policy uncertainty (including climate), cost of renewables, cost of energy, demand for power, adoption of innovations such as Electric Vehicles, and impact of energy efficiency programs.</p> <p>We take appropriate measures and actions to comply with existing rules and regulations so as to protect our environment and the communities we serve. We manage our business with a commitment to sustainability, exercising disciplined cost management to meet our customers' expectations for affordability and reliability. We proactively communicate with our stakeholders on our compliance strategies through robust disclosure, shareholder engagement and regulatory filings. And our strong governance framework demonstrates our commitment to oversight and accountability. Ameren is advancing our commitment to environmental stewardship through Ameren Missouri's Integrated Resource Plan (IRP) issued in September 2020. The 2020 IRP is designed to ensure that customers' long-term electric energy needs are met in a reliable, cost-effective and environmentally responsible manner. This plan includes significant increase in our renewable energy portfolio and a goal to reduce Ameren's for CO2 emissions 50% by 2030, 85% by 2040, and net-zero by 2050. Through implementing our strategy to significantly reduce carbon emissions, we strongly believe that we are effectively mitigating reputational risks associated with climate change.</p>
Acute physical	Relevant, always included	<p>Certain climate assumptions indicate present and continuing patterns of increased variability and severity of weather-related events. Electric transmission and distribution systems can be particularly affected by regional flooding and other extreme weather, some of which cannot be predicted with accuracy.</p> <p>Changes in weather patterns, including those that impact temperatures and precipitation, could significantly affect customer load patterns. These effects may increase or decrease the volume of electric and natural gas sales. In particular, the warming of the climate could increase electricity sales and reduce gas sales for heating load. This</p>

		<p>could result in increases or decreases in revenues for Ameren, depending on the level of warming. It also could reduce the production from renewable resources.</p> <p>Staying ahead of weather related impacts requires constant monitoring of weather conditions in our territories and requires planning and preparation that is constantly updated and tested. Recovery of weather related expenditures is directly related to preparation, reporting, and fulfillment of requirements imposed by regulators. One focus is on vegetation management in conjunction with requirements set forth by our regulators. Ameren also receives real-time weather prediction information from independent providers. To enhance weather preparedness, Ameren Missouri partners with Saint Louis University on a unique weather forecasting system called Quantum Weather. A network of monitoring stations provides neighborhood-by-neighborhood predictions of potential severe weather – hours in advance of its arrival.</p> <p>Ameren is investing in transmission system improvements to ensure that we will be able to provide reliable, safe service now and in the future. Ameren addresses fuel supply disruption risks through fuel inventory policies and the development of alternative delivery options at many of its facilities. Ameren also conducted assessments of the potential impact of limited water resources on the operation of our energy centers along rivers.</p>
Chronic physical	Relevant, always included	<p>Changes in weather patterns, including those that impact temperatures and precipitation, could affect customer load patterns. These effects may increase or decrease the volume of electric and natural gas usage. In particular, the warming of the climate could increase electricity sales and reduce natural gas sales for heating load. This could result in increases or decreases in revenues for Ameren, depending on the level of warming. It also could reduce the production from hydroelectric, wind, and solar renewable resources. It could also impact reliability and increase customer cost.</p> <p>Changes in natural resources may include low water levels in rivers; warmer water in rivers due to lower flows and higher ambient temperatures, reduced water quality due to low flows and higher ambient temperatures, increased flooding events along rivers; and longer growing seasons with increased vegetation. Changes that resulted in flooding could potentially impact generation, transmission systems, distribution systems and substations. This could potentially cause system failure which may result in additional requirements for hardening of the system. Longer growing seasons could result in increased vegetation that could potentially interfere with transmission and distribution lines. Over the next five years (2021-2025) Ameren</p>

		plans to invest \$3.7 billion in transmission system improvements to ensure that we will be able to provide reliable, safe service now and in the future. In addition, we have a robust enterprise risk management (ERM) and governance programs to identify, evaluate and manage risks. Our ERM program is a comprehensive, consistently applied management framework that captures all climate-related policy and legal, physical, reputational and financial risks. Risks are evaluated using criteria associated with financial and qualitative impacts and probability associated with the likelihood of impact.
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C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Technology

Transitioning to lower emissions technology

Primary potential financial impact

Increased capital expenditures

Company-specific description

Ameren Missouri's (AMO) 2020 Integrated Resource Plan (IRP) is designed to ensure that customers' long-term electric energy needs are met in a reliable, cost-effective and environmentally responsible manner.

The current IRP, issued in September 2020, outlined plans to significantly increase AMO's renewable energy portfolio, the retirement of the Meramec Energy Center in 2022 and all coal-fired generation by 2042 and the addition of 5,400 MWs of renewable generation by 2040. These amounts include a 400 MW wind generation facility acquired in 2020 and a 300 MW wind generation facility in January 2021 and which is expected to be complete later in 2021.

Ameren is targeting reductions in CO2 emissions of 50 percent by 2030 and 85 percent by 2040 (based on 2005 levels), with a goal of achieving net-zero CO2 emission by 2050.

More information is available at [AmerenMissouri.com/IRP](https://www.amerenmissouri.com/IRP).

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

8,000,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Ameren's strategy for addressing climate change is largely embedded in Ameren Missouri's (AMO) 2020 Integrated Resource Plan (IRP).

Cost of response to risk

8,000,000,000

Description of response and explanation of cost calculation

Ameren's strategy for addressing climate risk is largely embedded in AMO's IRP. The current IRP, issued in September 2020, outlined plans to significantly increase AMO's renewable energy portfolio, including the planned retirement of the Meramec Energy Center in 2022 and all coal-fired generation by 2042 and the addition of 5,400 MWs of wind generation by 2040. These amounts include a 400 MW wind generation facility acquired in 2020 and a 300 MW wind generation facility in January 2021 and which is expected to be complete later in 2021. A total addition of 5,400 MWs of renewables by 2040 represents and investment opportunity of ~\$8 billion. More information is available at [AmerenMissouri.com/IRP](https://www.amerenmissouri.com/IRP).

Ameren has a process for identifying risks and opportunities that allow its businesses to make prudent decisions while meeting our customers' energy needs in a safe, reliable,

efficient and environmentally responsible manner. Ameren develops action plans that mitigate risk, manage long-term customer costs and improve shareholder value. As of December 31, 2020, Ameren Missouri coal-fired energy centers represented, 11% of Ameren's rate base. Our five year plan (2021-2025) directs significant investments to transmission and distribution systems and renewable generation. Investments in transmission and distribution allow systems to be more efficient and provide access to renewable resources.

Comment

More information is available at [AmerenMissouri.com/IRP](https://www.amerensmissouri.com/IRP).

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact

Other, please specify

Increased operational cost, Increased capital cost, Reduced demand for goods/services, Reduction/disruption in production capacity, Reduction in capital availability, and Reduced stock price (market valuation)

Company-specific description

Changes in the levels of precipitation, including drought, could create potential difficulties for distribution systems ranging from excessive rainfall and flooding to a potential loss of water supply at energy centers due to lower river levels. There is a potential for disruption in fuel supply due to high levels of rainfall and/or flooding. Changes in precipitation could impact the water levels in the Missouri and Mississippi rivers and affect the operation of a number of Ameren Missouri's energy centers. Low water levels in these rivers, due to extreme or prolonged drought, could potentially negatively affect the efficiency of plant operations and a plant's ability to meet thermal discharge effluent regulatory limits that could result in load reductions and/or plant shutdowns. Low water levels could potentially force the installation of cooling towers at Ameren Missouri energy centers, which could require a large capital investment. Changes in precipitation could cause flooding that could potentially impact transmission and distribution systems. This could potentially cause system failure which may result in additional investments for hardening of the system.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,700,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Changes in weather patterns, impacting temperatures and precipitation, could impact customer load patterns. These effects may increase or decrease the volume of electric sales and natural gas usage. In particular, the warming of the climate could increase electricity sales and reduce gas sales for heating load. This could result in increases or decreases to revenues for Ameren, depending on the level of warming. It also could reduce production from hydroelectric, wind, and solar renewable resources.

The potential financial impact represents the total investment in transmission infrastructure of \$3.7 billion over the next five years (2021-2025) to ensure system reliability.

Cost of response to risk

3,700,000,000

Description of response and explanation of cost calculation

The potential financial impact represents the total investment in transmission infrastructure of \$3.7 billion over the next five years (2021-2025) to ensure system reliability.

Striving to stay ahead of weather-related impacts requires constant monitoring of weather conditions in our territories and requires planning and preparation that is constantly updated and tested. Recovery of weather related expenditures is directly related to preparation, reporting, and fulfillment of requirements imposed by regulators. One particular focus is on vegetation management in conjunction with requirements set by our regulators. Ameren is investing in transmission system improvements to ensure that it will be able to provide reliable, safe service now and in the future. Ameren Missouri continues grid modernization efforts with its Smart Energy Plan. The plan is designed to upgrade Ameren Missouri's electric infrastructure and includes investments that will upgrade the grid and accommodate more renewable energy. Ameren Missouri

partners with St Louis University on the Quantum Weather program to pinpoint severe weather activity on a localized basis. Ameren addresses fuel supply disruption risks via implementation of new fuel inventory policies and the development of alternative delivery options at many of its facilities. Over the next five years (2021-2025) Ameren plans to invest over \$3.7 billion in transmission system improvements to ensure that it will be able to provide reliable and safe service.

Comment

Service interruptions can occur due to failures of equipment as a result of severe or destructive weather or other causes.

The ability of Ameren Missouri and Ameren Illinois to respond promptly to such failures can affect customer satisfaction.

If customers, investors, legislators, or regulators have or develop a negative opinion of us and our utility services, this could result in increased costs associated with regulatory oversight and could affect the returns on common equity we are allowed to earn, as well as the access to and the cost of capital. Additionally, negative opinions about us could make it more difficult for our businesses to achieve favorable legislative or regulatory outcomes. Negative opinions could also result in increased use of distributed generation by our customers. Any of these consequences could adversely affect our results of operations, financial position, and liquidity.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Reputation

Shifts in consumer preferences

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

Changes in consumer behavior could impact the consumption of electricity and natural gas in our service territory. Consumers could implement life style changes due to climate change as well as in response to higher electricity and natural gas costs. Consumers could also install more customer owned generation. This could result in decreased electric sales.

Energy conservation, energy efficiency, distributed generation, energy storage, and other factors that reduce energy demand could adversely affect Ameren's results of operations, financial position, and liquidity. Without a regulatory mechanism to ensure

recovery, declines in energy usage will result in an under-recovery of Ameren Missouri's revenue requirement.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

570,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The potential financial impact represents the combined Ameren Missouri and Ameren Illinois anticipated energy efficiency program investments of approximately \$570,000,000 over the next four years (2021-2024).

Cost of response to risk

570,000,000

Description of response and explanation of cost calculation

The potential financial impact represents the combined energy efficiency program spend over the life of the current approved programs (a total investment of approximately \$570,000,000 investment: 2021-2024). The total costs of Ameren Missouri's Energy Efficiency programs is approximately \$170 million from 2021-2024. The total costs of Ameren Illinois's Energy Efficiency total program cost is approximately \$100 million per year (\$400 million, 2021-2024). Therefore, the \$570,000,000 investment equals \$170 million plus \$400 million.

Comment

State law requires Ameren Illinois to offer customer energy-efficiency programs, and imposes electric energy-efficiency savings goals and a maximum amount of investment in electric energy-efficiency programs through 2030, which is approximately \$100 million annually. Ameren Illinois plans to invest up to approximately \$100 million per year in electric energy-efficiency programs through 2025. While the Illinois Commerce Commission (ICC) has approved a plan consistent with this spending level through 2021, the ICC has the ability to reduce the amount of electric energy-efficiency savings goals in future plan program years if there are insufficient cost-effective programs

available, which could reduce the investments in electric energy-efficiency programs.

In 2018, the Missouri Public Service Commission issued an order approving Ameren Missouri's MEEIA 2019 plan. The plan includes a portfolio of customer energy-efficiency programs through December 2022 and low-income customer energy-efficiency programs through December 2024. Ameren Missouri intends to invest \$290 million over the life of the plan, including \$65 million in 2021 and \$70 million in 2022.

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Primary potential financial impact

Returns on investment in low-emission technology

Company-specific description

The Ameren Missouri's (AMO) 2020 Integrated Resource Plan (IRP) is designed to ensure that customers' long-term electric energy needs are met in a reliable, cost-effective and environmentally responsible manner.

The current IRP, issued in September 2020, outlined plans to significantly increase AMO's renewable energy portfolio, the retirement of the Meramec Energy Center in 2022 and all coal-fired generation by 2042 and the addition of 5,400 MWs of renewable generation by 2040. These amounts include a 400 MW wind generation facility acquired in 2020 and a 300 MW wind generation facility in January 2021 and which is expected to be complete later in 2021.

Ameren has a goal to reduce CO2 emissions 50% by 2030 and 85% by 2040, compared to 2005 levels and targets net-zero carbon emissions by 2050. More information is available at [AmerenMissouri.com/IRP](https://www.amerenmissouri.com/IRP).

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

8,000,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The potential financial impact represents Ameren Missouri pursuing ownership of a total of 5,400 megawatts (MW) by 2040 of renewable generation (representing an investment of approximately \$8 billion).

Cost to realize opportunity

8,000,000,000

Strategy to realize opportunity and explanation of cost calculation

The potential financial impact represents Ameren Missouri pursuing ownership of a total of 5,400 MW by 2040 of renewable generation (representing an investment of approximately \$8 billion).

Comment

Ameren's strategy for addressing climate risk is largely embedded in Ameren Missouri's 2020 Integrated Resource Plan (IRP). Targeting net-zero carbon emissions by 2050: Expect to add 3,100 MW of renewable generation by 2030 and a total of 5,400 MW by 2040. These amounts include a 400 MW wind generation facility acquired in 2020 and a 300 MW wind generation facility in January 2021 and which is expected to be complete[d] later in 2021; all coal-fired energy centers expected to be retired by 2042, and expect to seek an extension of operating license for our carbon-free Callaway Nuclear Energy Center beyond 2044. The IRP outlines plans to significantly increase our renewable energy portfolio.

More information is available at [AmerenMissouri.com/IRP](https://www.amerenmissouri.com/IRP).

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resilience

Primary climate-related opportunity driver

Other, please specify

Investments in transmission and distribution

Primary potential financial impact

Other, please specify

Increased market valuation through resilience planning (e.g., infrastructure, land, buildings)

Company-specific description

At year-end 2020, electric and gas transmission and distribution investments comprised 75% of Ameren's regulated infrastructure rate base, while coal-fired generation investments comprised only 11% of rate base. These percentages reflect our strategic allocation of increasing amounts of capital to distribution and transmission businesses and our view that the energy grid will be increasingly important and valuable to our customers, the communities we serve and our shareholders. This value is expected to be driven by the need for a smarter, more hardened grid to incorporate increasingly more distributed and renewable generation sources. Further, we expect the percent of rate base represented by coal-fired generation investments to decline in the years ahead as we focus on transmission and distribution investments and our announced preferred plan to increase renewable generation investments.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,700,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

At year-end 2020, electric and gas transmission and distribution investments comprised 75% of Ameren's regulated infrastructure rate base, while coal-fired generation investments comprised only 11% of rate base. These percentages reflect our strategic allocation of increasing amounts of capital to distribution and transmission businesses. This value is expected to be driven by the need for a smarter, more hardened grid to incorporate increasingly more distributed and renewable generation sources.

The potential financial impact represents the total investment over \$3.7 billion in transmission infrastructure over the next five years (2021-2025) to ensure system reliability.

Cost to realize opportunity

3,700,000,000

Strategy to realize opportunity and explanation of cost calculation

Over the next five years (2021-2025) Ameren plans to invest over \$3.7 billion in transmission system improvements to ensure that we will be able to provide reliable, safe service now and in the future.

Comment

Ameren provides safe, reliable, affordable, and cleaner energy that is foundational to the well-being and security of millions of people as well as the economy of our region and country.

Over the next five years (2021-2025) Ameren plans to invest over \$3.7 billion in transmission system improvements to ensure that we will be able to provide reliable, safe service now and in the future. There is a strong long-term infrastructure investment pipeline beyond 2025.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Other, please specify

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

Company-specific description

To educate and help customers become more efficient users of energy, Ameren Missouri and Ameren Illinois have implemented robust energy-efficiency programs. In Missouri, the Missouri Energy Efficiency Investment Act (MEEIA) established a regulatory framework that, among other things, allows electric utilities to recover costs (both program costs and margin reductions resulting from energy-efficiency programs) related to MoPSC-approved customer energy-efficiency programs. In 2018, the MoPSC issued an order approving Ameren Missouri's Missouri Energy Efficiency Investment Act 2019. The plan includes a portfolio of customer energy-efficiency programs through December 2022 and low-income customer energy-efficiency programs through December 2024, along with a rider. Ameren Missouri intends to invest \$290 million over the life of the plan, including \$65 million in 2021 and \$70 million 2022.

State law requires Ameren Illinois to offer customer energy-efficiency programs, and imposes electric energy-efficiency savings goals and a maximum amount of investment in electric energy-efficiency programs through 2030, which is approximately \$100 million annually. While the Illinois Commerce Commission (ICC) has approved a plan consistent with this spending level through 2021, the ICC has the ability to reduce the amount of electric energy-efficiency savings goals in future plan program years if there are insufficient cost-effective programs available, which could reduce the investments in electric energy-efficiency programs.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

570,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The potential financial impact represents the combined Ameren Missouri and Ameren Illinois anticipated energy efficiency program investments of approximately \$570,000,000 over the next four years (2021-2024).

Cost to realize opportunity

570,000,000

Strategy to realize opportunity and explanation of cost calculation

The potential financial impact represents the combined energy efficiency program spend over the life of the current approved programs (a total of approximately \$570,000,000 investment: 2021-2024). The total costs of Ameren Missouri's Energy Efficiency programs is approximately \$170 million from 2021-2024. The total costs of Ameren Illinois's Energy Efficiency total program cost is approximately \$100 million per year (\$400 million, 2021-2024). Therefore, the \$570,000,000 investment equals \$170 million plus \$400 million.

Comment

State law requires Ameren Illinois to offer customer energy-efficiency programs, and imposes electric energy-efficiency savings goals and a maximum amount of investment in electric energy-efficiency programs through 2030, which is approximately \$100 million annually. Ameren Illinois plans to invest up to approximately \$100 million per year in electric energy-efficiency programs through 2025. While the Illinois Commerce Commission (ICC) has approved a plan consistent with this spending level through 2021, the ICC has the ability to reduce the amount of electric energy-efficiency savings goals in future plan program years if there are insufficient cost-effective programs available, which could reduce the investments in electric energy-efficiency programs.

In 2018, the Missouri Public Service Commission issued an order approving Ameren Missouri's MEEIA 2019 plan. The plan includes a portfolio of customer energy-efficiency programs through December 2022 and low-income customer energy-efficiency programs through December 2024. Ameren Missouri intends to invest \$290 million over the life of the plan, including \$65 million in 2021 and \$70 million in 2022.

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	No, and we do not intend it to become a scheduled resolution item within the next two years	<p>During the business review portion of our May 2021 Ameren Annual Shareholder Meeting, we discussed Ameren Missouri's 2020 Integrated Resource Plan (IRP) and our plans to achieve net-zero carbon emissions by 2050. Ameren engaged with stakeholders as it developed the IRP. In September 2020, Ameren Missouri filed its IRP with the Missouri Public Service Commission ("MoPSC"), which targets cleaner and more diverse sources of energy generation, including solar, wind, hydro, and nuclear power, and supports increased investment in new energy technologies. The plan, which is subject to review by the MoPSC, also includes expanding renewable sources by adding 3,100 MW of renewable generation by the end of 2030 and a total of 5,400 MW of renewable generation by 2040. These amounts include the 400 MW wind generation facility acquired in 2020 and a 300 MW wind generation facility that Ameren Missouri acquired in January 2021 and which is expected to be completed later in 2021. The plan also advances the expected retirement dates of two coal-fired energy centers; all coal-fired energy centers expected to be retired by 2042. In September 2020, Ameren also announced a goal of achieving net-zero carbon emissions by 2050 and is targeting a 50% CO2 emissions reduction by 2030, 85% by 2040.</p> <p>In May 2021, Ameren released its 2021 climate risk report titled "Committed to Clean: Transformational Changes Toward Net-Zero". The report is based on recommendations from the Task Force on Climate-related Financial Disclosures (TCFD). This report provides information about the company's management of climate-related risks and opportunities, including its expansive plan to add 5,400 MW of clean energy in the coming decades. It also details how that plan is consistent with meeting the 1.5° Celsius goal, the target established by the Paris Agreement.</p> <p>These reports, which address varying topics, issues and reporting needs are available at Amereninvestors.com.</p>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
2DS Nationally determined contributions (NDCs)	<p>Ameren's strategy for addressing climate risk is largely embedded in Ameren Missouri's 2020 Integrated Resource Plan (IRP). To help us assess the resilience of the IRP against potential future climate policies and associated emissions requirements, we leveraged the EPRI study "Grounding Decisions: A Scientific Foundation for Companies Considering Global Climate Scenarios and Greenhouse Gas Goals," which summarized over 1,000 climate scenarios from the IPCC and others. The study was updated in April 2020 with the publication of a new report "Review of 1.5°C and Other Newer Global Emissions Scenarios: Insights for Company and Financial Climate Low-Carbon Transition Risk Assessment and Greenhouse Gas Goal Setting." The EPRI study offered a scientifically-based framework for considering uncertainty in climate-scenario analysis and provided insights that could be applied at the company level. The EPRI study also included other scenario data from sources reviewed by the IPCC, as well as some scenario data from sources not reviewed by the IPCC, such as the Natural Resources Defense Council and Bloomberg New Energy Finance.</p> <p>Much of EPRI's study builds on the scenario results released by the IPCC in its Fifth Assessment Report and on scenario data used by the IPCC in its "Special Report on 1.5°C." (IPCC Special Report). From the combined data sets of these IPCC reports, 78 scenarios were placed into one of three categories according to their probabilities of limiting increases in global average temperature to no more than 1.5°C. Each category includes a range of emissions pathways, which represent projected global annual CO2 emissions levels over a given period of time, along with a range of probabilities of staying below 1.5°C. To provide proper context for a review of Ameren Missouri's most recent IRP, we calculated Ameren's pro-rata share of emissions for the global electric sector scenarios from the EPRI analysis using Ameren's share of 2005 emissions. This allowed us to compare the emission reductions associated with our plan to the emissions pathways represented in the scenario analysis data used by EPRI.</p> <p>Comparing the IRP against those scenarios that exhibit a high likelihood of achievement of a 1.5°C goal, we found that the projected CO2 emissions under our current plan fall well within the range of the emissions defined by these scenarios. We expected these results because our current plan was tailored to be consistent with meeting a 1.5°C goal, as outlined in the Paris Agreement, and includes significant increases of clean energy resources, energy efficiency, accelerated coal plant retirements and increased electrification in comparison to our previous plan.</p>

	<p>Our goal to achieve net-zero carbon emissions by 2050 (time horizon considered) compared to 2005 levels is consistent with and supports the Paris Agreement, and limits the temperature rise to 1.5°C.</p> <p>We will continue to monitor technology developments that may present economically feasible and cleaner solutions in our ongoing effort to reduce GHG emissions. Our current plan represents a balanced and cost-effective approach to meet the long-term energy needs of our customers and transition to a cleaner energy portfolio in a responsible fashion. However, changes in energy policies and regulations could require adjustments to the plan in order to accelerate or increase carbon emissions reductions. We will continue to work closely with regulators, policymakers, and other key stakeholders to balance environmental stewardship with customer affordability and reliability during the clean energy transition.</p> <p>Learn more from our 2021 Committed to Clean: Transformational Changes Toward Net-Zero-Climate Report available under the ESG section of AmerenInvestors.com.</p>
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C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>Ameren has a process for identifying significant risks and opportunities that allow its business to make prudent decisions while meeting our customers' energy needs in a safe, reliable, efficient and environmentally responsible manner, including climate-related risks. Ameren develops action plans that mitigate risk, manage long-term customer costs and improve shareholder value.</p> <p>Ameren's strategy for addressing climate risk is largely embedded in AMO's Integrated Resource Plan (IRP). The current IRP, issued in September 2020, outlined plans to significantly increase AMO's renewable energy portfolio, including the planned retirement of all of AMO's coal-fired generation capacity over the next 20 years, with the</p>

		retirement of the Meramec Energy Center by the end of 2022 and all coal-fired generation by 2042 and the addition of at least 5,400 MWs of wind generation by 2040. We acquired a 400 MW wind project in 2020 and a 300 MW wind generation facility in January 2021 and which is expected to be complete later in 2021. Ameren has a goal to reduce CO2 emissions 50% by 2030, 85% by 2040 and Net-Zero by 2050, as compared to 2005 levels. More information is available at AmerenMissouri.com/IRP .
Supply chain and/or value chain	Yes	Ameren's Market risk management department has policies to address fuel price volatility and supply chain risks. As climate legislation/regulation is finalized, Ameren's risk management department reviews those policies to ensure that the policies will be sufficient to address any fuel price volatility that may arise. Robust policies and processes exist to allow Ameren management to review and approve each offset or allowance financial hedge that may be executed. Caps or limits on specific transactions may be implemented to diversify the portfolio of hedges to minimize the negative financial impact associated with any single hedge investment or offset project.
Investment in R&D	Yes	<p>Ameren has invested in research relating to alternative forms of generation. In 2021, Ameren spent over \$1.7 million for CO2 emissions reduction research, including the Electric Power Research Institute (EPRI) electrification programs, Energy Sustainability Interest Group, Sustainability Benchmarking Project, Distributed Energy Resource projects, cyber security, and Grid Modernization Programs. In addition to EPRI activities, Ameren participated in the Missouri S&T Intelligent Systems Center, the Gas Technology Institute Emerging Technology Program, and energy storage programs</p> <p>Ameren partnered with the University of Missouri System, Capital Innovators and industry associations to invest, mentor and support energy technology startups. Through this innovative public-private partnership, Ameren invested \$1.9 million from 2017- 2019 in energy startups and technologies with the goal of meeting future needs for clean energy in our service territory. To date, over 150 jobs have been created along with an additional \$20 million in follow-on funding for these companies. Ameren is continuing our "Ameren Accelerator" efforts through EPRI's Incubator energy Labs Network. This collaborative endeavor, consisting of over a dozen peer utilities, focuses on demonstration pilots of new technologies set to transform the energy landscape, including those that have a focus on carbon and the environment.</p>

Operations	Yes	<p>Ameren develops action plans that mitigate risk, manage long-term customer costs and improve shareholder value. As of December 31, 2020, Ameren Missouri's coal-fired energy centers represented 11% of Ameren's rate base. By year end of 2025, we estimate our rate base will include 82% from electric and natural gas transmission and distribution investments with coal generation declining to 7%. These percentages reflect our strategic allocation of increasing amounts of capital to distribution and transmission businesses and our view that the energy grid will be increasingly important and valuable to our customers, the communities we serve and our shareholders. This value is expected to be driven by the need for a smarter, more hardened grid to incorporate increasingly more distributed and renewable generation sources.</p> <p>Investments in transmission and distribution allow systems to be more efficient and provide access to renewable resources. The following initiatives are part of the solution: energy efficiency programs, optimizing operations at our energy centers; evaluating the potential retirement of existing coal-fired generation and new renewable generation, and acquiring hybrid bucket trucks, natural gas fuel trucks and electric vehicles.</p> <p>Ameren's strategy for addressing climate risk is largely embedded in AMO's Integrated Resource Plan (IRP). The current IRP, issued in September 2020, outlined plans to significantly increase AMO's renewable energy portfolio, including the planned retirement of the Meramec Energy Center in 2022 and all coal-fired generation by 2042. The IRP also includes expanding renewable sources by adding 3,100 MW of renewable generation by the end of 2030 and a total of 5,400 MWs of wind generation by 2040. These amounts include a 400 MW wind generation facility acquired in 2020 and a 300 MW wind generation facility in January 2021 and which is expected to be completed later in 2021. Ameren has a goal of achieving net-zero carbon emissions by 2050 and is targeting a 50% CO2 emissions reduction by 2030, 85% by 2040, as compared to 2005 levels. More information is available at AmerenMissouri.com/IRP.</p>
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C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Capital expenditures Capital allocation	<p>Our strategy to address and respond to climate risk and opportunities requires us to evaluate all aspects of our electric, natural gas and transmission businesses. The primary sources of Ameren's greenhouse gas (GHG) emissions are Ameren Missouri's fossil-fueled energy centers. Smaller amounts of GHG emissions can also be attributed to our natural gas and electric delivery operations. As a result, we are taking actions across all parts of the business as we address the potential impacts of climate change and strive to reduce our GHG emissions significantly.</p> <p>Our strategy addresses:</p> <ol style="list-style-type: none"> 1. Electric Generation. We are transitioning our generation fleet to cleaner resources, as set forth in Ameren Missouri's 2020 Integrated Resource Plan (IRP or "plan"). This plan is consistent with achieving our goal of net-zero carbon emissions by 2050. 2. Electric Transmission. We are expanding and enhancing our electric transmission grid to integrate additional clean, renewable energy resources while reducing energy losses and improving system reliability. 3. Electric Grid. We are modernizing the electric grid to accommodate more energy from renewable sources, strengthen our system to be more resilient to climate change and weather-related events, and improve efficiency and reliability, as well as to enable our customers to have greater control over their energy use, both in terms of how much they use and when they use it. 4. Energy Efficiency. We are implementing expanded programs that incentivize customers to reduce their energy consumption because the cleanest energy is the energy that is not needed. 5. Low- to No-Carbon Energy Resources. Ameren will continue to build on an already solid base of clean energy sources. We are investing in the long-term stability of the Callaway Energy Center and expect to seek an extension of its operating license beyond 2044. We will also continue to invest in our hydro-powered energy centers at Keokuk and Osage. Also, Ameren will collaborate with EPRI and the Gas Technology Institute on a Low-Carbon Resources Initiative to accelerate development and demonstration of low- and zero-carbon energy technologies required for decarbonization. 6. Natural Gas Distribution System. We are reducing methane leakage in our natural gas distribution system. We have replaced approximately 100% of cast and wrought iron pipeline on the natural gas delivery system, with plans to eliminate the

	<p>remaining <1% of unprotected steel pipeline by the end of 2021. These efforts and operational practices have reduced our fugitive methane emissions rate to approximately 0.1%, averaged over the last five years.</p> <p>7. Other Non-Energy Center Emissions. We are promoting customer programs related to renewable energy and electrification of transportation.</p> <p>Our strategy for addressing climate risk, which is largely embedded in our IRP, is expected to deliver significant reductions in carbon emissions, by the end of the decade with a goal of ultimately reaching net-zero carbon emissions by 2050, while effectively balancing customer affordability and reliability, and managing related risks. Ameren's strategy for addressing climate risk is largely embedded in AMO's Integrated Resource Plan (IRP). The current IRP, issued in September 2020, outlined plans to significantly increase AMO's renewable energy portfolio, including the planned retirement of the retirement of the Meramec Energy Center in 2022 and all coal-fired generation by 2042. The IRP also includes expanding renewable sources by adding 3,100 MW of renewable generation by the end of 2030 and a total of 5,400 MWs of wind generation by 2040. These amounts include a 400 MW wind generation facility acquired in 2020 and a 300 MW wind generation facility in January 2021 and which is expected to be completed later in 2021. Ameren has a goal of achieving net-zero carbon emissions by 2050 and is targeting a 50% CO2 emissions reduction by 2030, 85% by 2040, as compared to 2005 levels. More information is available at AmerenMissouri.com/IRP.</p> <p>Capital expenditures/capital allocation are factored into Ameren's financial planning and risk management processes and are regularly considered.</p> <p>We expect to make significant capital expenditures to maintain and improve our electric and natural gas utility infrastructure and to comply with existing environmental regulations. We estimate that we will invest up to \$17.8 billion (Ameren Missouri – up to \$9.3 billion; Ameren Illinois – up to \$8.2 billion; ATXI – up to \$0.2 billion) of capital expenditures from 2021 through 2025. Ameren's and Ameren Missouri's estimates include 300 MWs of wind generation at the Atchison Renewable Energy Center, but exclude incremental renewable generation investment opportunities of 1,200 MWs by 2025, which are included in the IRP.</p> <p>For example, our ability to complete construction projects successfully within projected estimates and to acquire wind generation facilities after they are constructed is contingent upon many variables and subject to substantial risks. These variables include, but are not limited to, project management expertise, escalating costs and for labor and materials,</p>
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		<p>including project management expertise; escalating costs and/or shortages for labor, materials, and equipment, including changes to tariffs on materials; the ability of suppliers, contractors, and developers to meet contractual commitments timely; changes in the scope and timing of projects; the ability to obtain required regulatory, project, and permit approvals; the ability to obtain necessary rights-of-way, easements, and transmission connections at an acceptable cost in a timely fashion; unsatisfactory performance by the projects when completed; the inability to earn an adequate return on invested capital; the ability to raise capital on reasonable terms; and other events beyond our control, including construction delays due to weather. With respect to the transition of Ameren Missouri's generation fleet and achievement of the carbon emission reduction targets outlined in the 2020 IRP, factors also include MoPSC approval for the retirement of energy centers and new or continued customer energy-efficiency programs; the cost of wind, solar, and other renewable generation and storage technologies; the ability to qualify for, and use, federal production or investment tax credits; changes in environmental laws or requirements, including those related to carbon emissions; and energy prices and demand.</p> <p>For more information see Ameren's 2020 Annual Report on Form 10-K for the year ended December 31, 2020 and other reports filed with the Securities and Exchange Commission.</p>
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C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

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

Year target was set

2019

Target coverage

Business division

Scope(s) (or Scope 3 category)

Scope 1

Base year

2019

Covered emissions in base year (metric tons CO₂e)

24,413,651

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

1

Target year

2020

Targeted reduction from base year (%)

0

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

24,413,651

Covered emissions in reporting year (metric tons CO₂e)

276,949

% of target achieved [auto-calculated]

Target status in reporting year

Achieved

Is this a science-based target?

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

Target ambition

Please explain (including target coverage)

Ameren Missouri Energy Efficiency Electric Programs (01/01/2020-12/31/2020).

2020 Savings Target: 289 GWh (approximately 224,690 metric tons of CO₂, assuming CO₂ emission factor of 0.72 metric ton/MWh and adjusting for line losses)

2020 Savings Actual: 356 GWh (approximately 276,940 metric tons of CO₂, assuming CO₂ emission factor of 0.72 metric ton/MWh and adjusting for line losses)

Exceeded 2020 savings target by 23%.

Targeted reduction is <1% of Scope 1 emissions.

Target reference number

Abs 2

Year target was set

2019

Target coverage

Business division

Scope(s) (or Scope 3 category)

Scope 1

Base year

2019

Covered emissions in base year (metric tons CO₂e)

24,413,651

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

1

Target year

2020

Targeted reduction from base year (%)

0

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

24,413,651

Covered emissions in reporting year (metric tons CO₂e)

343,466

% of target achieved [auto-calculated]

Target status in reporting year

Achieved

Is this a science-based target?

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

Target ambition

Please explain (including target coverage)

Ameren Illinois Energy Efficiency Electric Programs (Planning Year: 01/01/2020-12/31/2020)

2020 Savings Target: 370 GWh (approximately 287,700 metric tons of CO₂, assuming CO₂ emission factor of 0.72 metric ton/MWh and adjusting for line losses).

2020 Savings Actual: 442 GWh (approximately 343,400 metric tons of CO₂, assuming CO₂ emission factor of 0.72 metric ton/MWh and adjusting for line losses)

Exceeded 2020 savings target by approximately 19%.

Targeted reduction is <1% of Scope 1 emissions.

Target reference number

Abs 3

Year target was set

2019

Target coverage

Business division

Scope(s) (or Scope 3 category)

Scope 1

Base year

2019

Covered emissions in base year (metric tons CO₂e)

24,413,651

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

1

Target year

2020

Targeted reduction from base year (%)

0

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

24,413,651

Covered emissions in reporting year (metric tons CO₂e)

22,808

% of target achieved [auto-calculated]

Target status in reporting year

Achieved

Is this a science-based target?

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

Target ambition

Please explain (including target coverage)

Ameren Illinois Energy Efficiency Natural Gas Programs (Planning Year: 1/1/2020 – 12/31/2020)

2020 Savings Target: 3,074,613 therms (approximately 16,322 metric tons of CO₂)

2020 Savings Actual: 4,296,545 therms (approximately 22,800 metric tons of CO₂)

Completed 2020 savings target by approximately 140%.

Targeted reduction is <1% of Scope 1 emissions.

Target reference number

Abs 4

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1

Base year

2005

Covered emissions in base year (metric tons CO₂e)

38,113,792

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

50

Target year

2030

Targeted reduction from base year (%)

50

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

19,056,896

Covered emissions in reporting year (metric tons CO₂e)

11,882,984

% of target achieved [auto-calculated]

137.6447035236

Target status in reporting year

Underway

Is this a science-based target?

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

Target ambition

1.5°C aligned

Please explain (including target coverage)

More than 99% of Ameren's direct GHG emissions occur as a result of operations of Ameren Missouri's fossil-fueled energy centers. In 2020, we announced a comprehensive plan that significantly reduces carbon emissions while ensuring that we can deliver safe, reliable and affordable energy to our customers. In particular, the plan includes a company-wide goal to achieve net-zero carbon emissions by 2050, including aggressive interim goals to reduce carbon emissions below 2005 levels by 50% by 2030 and 85% by 2040, accelerating coal-fired energy center retirements, significantly increasing renewable energy investments and extending the life of our Callaway nuclear energy center.

The 2005 base year reported is CO₂ not CO₂e.

% target achieved: 31% [% Difference: 2005 to 3-YR Average (2018-2020) Ameren Corporation CO₂ Emissions]

The target is underway

Target reference number

Abs 5

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1

Base year

2005

Covered emissions in base year (metric tons CO₂e)

38,113,792

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

85

Target year

2040

Targeted reduction from base year (%)

85

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

5,717,068.8

Covered emissions in reporting year (metric tons CO₂e)

11,882,984

% of target achieved [auto-calculated]

80.9674726609

Target status in reporting year

Underway

Is this a science-based target?

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

Target ambition

1.5°C aligned

Please explain (including target coverage)

More than 99% of Ameren's direct GHG emissions occur as a result of operations of Ameren Missouri's fossil-fueled energy centers. In 2020, we announced a comprehensive plan that significantly reduces carbon emissions while ensuring that we can deliver safe, reliable and affordable energy to our customers. In particular, the plan includes a company-wide goal to achieve net-zero carbon emissions by 2050, including aggressive interim goals to reduce carbon emissions below 2005 levels by 50% by 2030 and 85% by 2040, accelerating coal-fired energy center retirements, significantly increasing renewable energy investments and extending the life of our Callaway nuclear energy center.

The 2005 base year reported is CO₂ not CO₂e.

% target achieved: 31% [% Difference: 2005 to 3-YR Average (2018-2020) Ameren Corporation CO₂ Emissions]

The target is underway.

Target reference number

Abs 6

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1

Base year

2005

Covered emissions in base year (metric tons CO₂e)

38,113,792

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2050

Targeted reduction from base year (%)

100

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

0

Covered emissions in reporting year (metric tons CO₂e)

11,882,984

% of target achieved [auto-calculated]

68.8223517618

Target status in reporting year

Underway

Is this a science-based target?

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

Target ambition

1.5°C aligned

Please explain (including target coverage)

More than 99% of Ameren's direct GHG emissions occur as a result of operations of Ameren Missouri's fossil-fueled energy centers. In 2020, we announced a comprehensive plan that significantly reduces carbon emissions while ensuring that we can deliver safe, reliable and affordable energy to our customers. In particular, the plan includes a company-wide goal to achieve net-zero carbon emissions by 2050, including aggressive interim goals to reduce carbon emissions below 2005 levels by 50% by 2030 and 85% by 2040, accelerating coal-fired energy center retirements, significantly increasing renewable energy investments and extending the life of our Callaway nuclear energy center.

The 2005 base year reported is CO₂ not CO₂e.

% target achieved: 31% [% Difference: 2005 to 3-YR Average (2018-2020) Ameren Corporation CO₂ Emissions]

The target is underway.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

Net-zero target(s)

Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2020

Target coverage

Business division

Target type: absolute or intensity

Absolute

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

MWh

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

10

Target year

2020

Figure or percentage in target year

10

Figure or percentage in reporting year

10

% of target achieved [auto-calculated]

Target status in reporting year

Achieved

Is this target part of an emissions target?

The 2020 Missouri Renewable Energy Standard requirement was 3,060,189---10% of the total retail electric sales of 30,601,887 MWh for 2020. REC's generated in previous years, through the banking provision in the law, from solar, wind, landfill gas, and hydroelectric (Keokuk Energy Center) were used to meet compliance.

Is this target part of an overarching initiative?

Other, please specify

Renewable Energy Standard - Missouri

Please explain (including target coverage)

The 2020 Missouri Renewable Energy Standard requirement was 3,060,189---10% of the total retail electric sales of 30,601,887 MWh for 2020. REC's generated in previous years, through the banking provision in the law, from solar, wind, landfill gas, and hydroelectric (Keokuk Energy Center) were used to meet compliance.

Target reference number

Low 2

Year target was set

2020

Target coverage

Business division

Target type: absolute or intensity

Absolute

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

MWh

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

10

Target year

2020

Figure or percentage in target year

10

Figure or percentage in reporting year

10

% of target achieved [auto-calculated]

Target status in reporting year

Achieved

Is this target part of an emissions target?

2020 Ameren Illinois RECs: 2,459,275 MWhs (RECs 7.1% of total retail load). Total retail load was 34,804,747 MWh for calendar year 2020 and includes all retail

customers, regardless of whether they took the supply component of the utility bill from Ameren Illinois or an alternative supplier.

Is this target part of an overarching initiative?

Other, please specify

Renewable Energy Credits – Illinois Renewable Portfolio Standard

Please explain (including target coverage)

2020 Ameren Illinois RECs: 2,459,275 MWhs (RECs 7.1% of total retail load). Total retail load was 34,804,747 MWh for calendar year 2020 and includes all retail customers, regardless of whether they took the supply component of the utility bill from Ameren Illinois or an alternative supplier.

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2020

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Low-carbon vehicles

Percentage of low-carbon vehicles in company fleet

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

35

Target year

2030

Figure or percentage in target year

35

Figure or percentage in reporting year

5

% of target achieved [auto-calculated]

Target status in reporting year

Underway

Is this target part of an emissions target?

100% of Ameren's new light-duty vehicle purchases by 2030 will be electric and 35% of the company's overall vehicle fleet (light-, medium-, and heavy-duty trucks, along with forklifts and ATV/UTVs) will be electrified by 2030.

Is this target part of an overarching initiative?

Other, please specify

100% of Ameren's new light-duty vehicle purchases by 2030 will be electric and 35% of the company's overall vehicle fleet (light-, medium-, and heavy-duty trucks, along with forklifts and ATV/UTVs) will be electrified by 2030.

Please explain (including target coverage)

Electrification supports better utilization of the electric grid, reduces carbon emissions and helps lower energy costs for all customers. Our electrification strategy includes efforts to implement policies and programs, and the related infrastructure investments, to promote and enable electric vehicle adoption.

Missouri business owners can apply for incentives to offset construction costs of electric vehicle charging stations. Ameren Missouri expects to assist with the deployment of 1,000 local-level charging stations at more than 350 locations. Travelers looking to drive long-distance in their electric vehicles will enjoy use of one of 14 DC Fast Chargers strategically located along highways. This part of the Ameren Missouri Charging Ahead Program (\$11 million investment).

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs6

Target year for achieving net zero

2050

Is this a science-based target?

Yes, but we have not committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

Please explain (including target coverage)

More than 99% of Ameren's direct GHG emissions occur as a result of operations of Ameren Missouri's fossil-fueled energy centers. In 2020, we announced a comprehensive plan that significantly reduces carbon emissions while ensuring that we can deliver safe, reliable and affordable energy to our customers. In particular, the plan includes a company-wide goal to achieve net-zero carbon emissions by 2050, including interim goals to reduce carbon emissions below 2005 levels by 50% by 2030 and 85% by 2040, accelerating coal-fired energy center retirements, significantly increasing renewable energy investments and extending the life of our Callaway nuclear energy center.

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	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	5	661,836
Not to be implemented	0	0

C4.3b

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

Initiative category & Initiative type

Energy efficiency in buildings

Other, please specify

Lighting, heat pump, and HVAC upgrades

Estimated annual CO₂e savings (metric tonnes CO₂e)

20

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

507

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

2,410,000

Payback period

>25 years

Estimated lifetime of the initiative

Ongoing

Comment

Ameren has implemented various voluntary initiatives to improve efficiency and reduce GHG emissions at facilities dedicated to housing its personnel and operating equipment. These initiatives include replacing heating and cooling units and replacing fluorescent fixtures with energy efficient LED fixtures. Adjusting lighting levels to meet current standards, in facilities where applicable. In 2020, Ameren completed several energy efficiency projects that are expected to reduce energy consumption by approximately 20,000 kWh annually and reduce our CO₂ emissions by ~20 metric tons annually (assuming 0.72 metric tons of CO₂ per 1 MWh and adjusting for line losses). Ameren continues to promote and operate a single stream recycling program at operating centers and office buildings that will divert office waste from landfills. Ameren has two buildings that are LEED (Leadership in Energy & Environmental Design) certified. Also, Ameren installed electric vehicle charging stations at our buildings with a total of 204 ports.

Initiative category & Initiative type

Energy efficiency in production processes

Other, please specify

Ameren Energy Efficiency Programs

Estimated annual CO2e savings (metric tonnes CO2e)

645,316

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

19,980,000

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

174,700,000

Payback period

4-10 years

Estimated lifetime of the initiative

3-5 years

Comment

Energy efficiency programs are offered to our electric customers in both Missouri and Illinois. These help Ameren reduce exposure related to GHG's while improving our relationship with our customers. These energy efficiency programs include education programs, installation of efficient heating and air conditioning systems, home energy audits, low-income weatherization, programmable thermostat programs, and other residential and business programs. Ameren Missouri has an energy efficiency program that saved 356,818 MWh (2020) and avoided approx. 276,940 metric tons, assuming 0.72 metric tons of CO2 per 1 MWh and adjusting for line losses. In 2020, Ameren Illinois saved 442,517 MWh and avoided approximately 343,466 metric tons, assuming 0.72 metric tons of CO2 per 1 MWh and adjusting for line losses. Energy efficiency programs are offered to our natural gas customers in Illinois and Missouri. Ameren Illinois' program saved approx. 4.29 million therms in 2020 and avoided approximately 22,800 metric tons of customer CO2, assuming 11.7 pounds of CO2 per 1 therm. Ameren Missouri is actively engaged in implementing gas energy efficiency measures although there are no currently defined savings targets. Ameren Missouri saved approx. 394,000 therms in 2020 and avoided approx. 2,092 metric tons of customer CO2, assuming 11.7 pounds of CO2 per 1 therm. While these programs are voluntary there are earnings opportunities for implementing.

Initiative category & Initiative type

Other, please specify

Other, please specify

Process emissions reductions - Optimize operations at energy centers

Estimated annual CO2e savings (metric tonnes CO2e)

16,500

Scope(s)

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)

0

Payback period

16-20 years

Estimated lifetime of the initiative

Ongoing

Comment

Ameren Missouri implemented projects to optimize operations at its energy centers in 2020. Ameren Missouri is unable to calculate the savings from these investments.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	The Missouri Renewable Energy Standard (MoRES) took effect in 2011. In 2020, Ameren purchased RECs and operated renewable facilities to comply with this standard. This included a 15-year wind power purchase agreement for 102 MWs of wind energy ; 15 MW (gross) of landfill gas generation which went operational in June 2012; 5.7 MW (DC gross) of solar generation at the O'Fallon Renewable Energy Center; 90 kW of solar generation at Ameren's headquarters; and an upgrade of existing hydroelectric facilities. In 2020, Ameren Missouri's non-solar generation requirement was 2,998,986 MWhs and was met by retiring RECs associated with generation from the Ameren Missouri Keokuk Energy Center, Maryland Heights Renewable Energy Center, and Pioneer Prairie wind farm, and banked solar RECs. Both Maryland Heights and the banked solar REC's were eligible for a 1.25 multiplier due to being Missouri based renewable generation. In 2020,

	<p>the solar requirement was 61,204 MWhs and was met with S-RECs generated from Ameren Missouri customer installed solar and the O'Fallon Renewable Energy Center. In Illinois, Ameren Illinois continued to comply with the Illinois Renewable Portfolio Standard. Ameren Illinois purchased RECs to comply with its requirements as it has no renewable generation.</p> <p>Ameren Missouri 2020 Integrated Resource Plan (IRP) is designed to ensure that customers' long-term electric energy needs are met in a reliable, cost-effective and environmentally responsible manner. Ameren's preferred plan focuses on transitioning the generation fleet to a cleaner and more fuel diverse energy portfolio in a responsible manner. That portfolio includes the addition of more renewable generation, expansion of its energy efficiency programs, planned retirement of its coal fleet by 2042 and implementation of advanced technologies. All of these investments and activities are expected to result in a reduction in CO2 emissions.</p>
Dedicated budget for energy efficiency	<p>Much of the technical and policy discussion related to climate change and a sustainable energy future focuses on energy efficiency. Ameren energy efficiency programs help reduce GHG emissions, lower the cost impact on the consumer, and improve our relationship with our customers. Ameren Illinois and Ameren Missouri programs spent approx. \$174 million on a number of energy efficiency programs in 2020 (electric and natural gas programs). Through these energy efficiency initiatives, Ameren estimates it avoided approx. 645,300 tons of CO2 in 2020. Through Ameren's automated meter reading capabilities in Missouri and Illinois, Ameren is able to provide customer information through the Manage My Energy analysis tools to allow customers to better understand and manage their energy consumption.</p> <p>In 2018, the MoPSC issued an order approving Ameren Missouri's Missouri Energy Efficiency Investment Act 2019. The plan includes a portfolio of customer energy-efficiency programs through December 2022 and low-income customer energy-efficiency programs through December 2024, along with a rider. Ameren Missouri intends to invest \$290 million over the life of the plan. In 2020, Ameren Missouri spent about \$61 million on energy efficiency programs. Through these energy efficiency initiatives, Ameren Missouri estimates it avoided approx. 279,000 metric tons of CO2.</p> <p>State law requires Ameren Illinois to offer customer energy-efficiency programs, and imposes electric energy-efficiency savings goals and a maximum amount of investment in electric energy-efficiency programs through 2030, which is approximately \$100 million annually. While the Illinois Commerce Commission (ICC) has approved a plan consistent</p>

	<p>with this spending level through 2021, the ICC has the ability to reduce the amount of electric energy-efficiency savings goals in future plan program years if there are insufficient cost-effective programs available, which could reduce the investments in electric energy-efficiency programs. In September 2017, the ICC issued an order approving Ameren Illinois' electric and natural gas energy-efficiency plans, as well as regulatory recovery mechanisms. In 2020, Ameren Illinois spent \$113 million on energy efficiency programs. Through these energy efficiency initiatives, Ameren Illinois estimates it avoided approx. 366,000 metric tons of CO₂.</p>
Dedicated budget for low-carbon product R&D	<p>Ameren has invested in research relating to alternative forms for generation. In 2020, Ameren spent over \$1.71 Million for CO₂ emissions reduction and alternative energy generation R&D programs.</p> <p>Ameren partnered with the University of Missouri System, Capital Innovators and industry associations to invest, mentor and support energy technology startups. Through this innovative public-private partnership, Ameren invested \$1.9 million from 2017- 2019 in energy startups and technologies with the goal of meeting future needs for clean energy in our service territory. To date, over 150 jobs have been created along with an additional \$20 million in follow-on funding for these companies. Ameren is continuing our "Ameren Accelerator" efforts through EPRI's Incubatenergy Labs Network. This collaborative endeavor, consisting of over a dozen peer utilities, focuses on demonstration pilots of new technologies set to transform the energy landscape, including those that have a focus on carbon and the environment.</p>
Employee engagement	<p>In 2018, Ameren created a Corporate Social Responsibility (CSR) Executive Steering Committee. The CSR Executive Steering Committee leads Ameren's enterprise-wide social responsibility efforts and fosters and advocates for a culture of sustainability among co-workers and suppliers that is consistent with Ameren's mission and vision. In 2010, Ameren created a CSR Council (formerly known as Corporate Sustainability Council) to research and recommend policies and improvement objectives, track our sustainable practices, develop ways to engage employees and stakeholders on the issues, and help guide Ameren to be more sustainable in the future. Ameren continues to promote and operate a single stream recycling program at operating centers and office buildings that will divert office waste from landfills. It is estimated to be a net neutral cost to the company.</p> <p>Ameren released its 2021 Ameren Sustainability Report in May 2021. The 2021 Sustainability report describes a variety of activities Ameren is doing to engage employees reduce emissions activities at work, home and in the community. In 2020, Ameren developed and</p>

	<p>implemented an environmental policy.</p> <p>Ameren offered plug-in electric vehicle (EV) incentives to co-workers in 2020. Available incentives included \$2,500 for new EV purchases and \$1,500 for leased or used EV purchased. Ameren offers free charging for co-workers at our facilities.</p>
Internal price on carbon	<p>Ameren includes a carbon price in its evaluation of long-term resource planning for its Missouri regulated business through its Integrated Resource Plan (IRP) process (i.e., Scope 1 emissions from generation). The price is included to represent the expectation for either regulation of carbon dioxide emissions through a mechanism that establishes an explicit price for carbon dioxide emissions, such as a carbon tax or cap-and-trade program, or through voluntary emission credit trading markets established by RTO's or state or regional alliances. For its 2020 IRP, Ameren Missouri used a base and high scenario price. Starting in 2025 the base price starts at \$1.13 per short ton (\$1.03 per metric ton) and escalates at approximately 43% per year for the first 5 years and then slows to an escalation of 1.5% per year thereafter. Starting in 2025 the high price starts at \$3.23 per short ton (\$2.93 per metric ton) and escalates at approximately 43% per year for the first 5 years and then slows to an escalation of 3% per year thereafter. The prices used in the IRP process are established based on discussions with Company executives involved in environmental, regulatory and legislative activities. Establishment of the carbon price assumptions includes a review of price assumptions used or produced by other utilities, policy analysts, and government agencies, including the Social Cost of Carbon estimates used by the federal government. Ameren Missouri's 2020 IRP describes in detail the process used to establish carbon price assumptions for its evaluations at that time. The same general process continues to be used. Inclusion of a carbon price affects Ameren Missouri's evaluation of both new and existing generation resources, including potential retirement of fossil generation, and also increases the cost effectiveness of energy efficiency measures.</p>

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

Pure Power voluntary REC program for customers

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

Avoided emissions

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

Other, please specify
based on emission factors in eGRID

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

0

Comment

Ameren Missouri's voluntary green program called Pure Power sold RECs to customers in 2020. Since the start of the program in 2007, the RECs were retired on behalf of these customers with a potential reduction in over 659,000 metric tons of Scope 1 CO₂ assuming 0.72 metric tons of CO₂ per 1 MWh and adjusting for line losses.

Level of aggregation

Product

Description of product/Group of products

Ameren Missouri Solar Rebates

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

Avoided emissions

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

Other, please specify
based on emission factors in eGRID

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

0

Comment

In 2010, Ameren Missouri began to issue solar rebates to customers who installed solar electric generating systems on their homes and businesses. By the end of 2020, Ameren Missouri had approximately 89 MWs of customer-installed private solar generation in its service territory. By generating emissions-free renewable energy at their homes and businesses, customers reduce the amount of energy they purchase

from the utility. This has the potential to produce in excess of 123,000 MWh per year, avoiding over 92,250 metric tons of Scope 1 CO₂, assuming 0.72 metric tons of CO₂ per 1 MWh. The utility generates less energy and therefore lowers its GHG emissions, as a result of these systems.

Level of aggregation

Product

Description of product/Group of products

Ameren Missouri Energy Efficiency Program

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

Avoided emissions

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

Other, please specify
based on emission factors in eGRID

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

0

Comment

Changes in how our customers use electricity can reduce emissions through implementation of more efficient technologies or operations. Demand Side Management-Electricity energy efficiency programs are offered to our electricity customers in both Missouri and Illinois. This provides opportunities for Ameren to implement energy efficiency programs that enable the achievement of climate goals and lower the impacts of climate costs to the consumer, improving our relationship with our customers. The energy efficiency programs include education programs, installation of energy efficient heating and air conditioning systems, home energy audits, low-income weatherization, programmable thermostat programs, and other residential and business programs. Ameren Missouri has an energy efficiency program that saved 356,800 MWh and avoided approximately 276,900 metric tons of Scope 1 CO₂, assuming 0.72 metric tons of CO₂ per 1 MWh and adjusting for line losses in 2020.

Level of aggregation

Product

Description of product/Group of products

Ameren Illinois Energy Efficiency

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

Avoided emissions

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

Other, please specify
based on emission factors in eGRID

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

0

Comment

Ameren Illinois has an energy efficiency program approved through 2021 that in 2020 saved 442,500 MWh and avoided approximately 343,400 metric tons of Scope 1 CO₂, assuming 0.72 metric tons of CO₂ per 1 MWh and adjusting for line losses in 2020.

Level of aggregation

Product

Description of product/Group of products

Ameren Natural Gas Energy Efficiency Program

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

Avoided emissions

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

Other, please specify
based on emission factors in eGRID

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

0

Comment

Demand Side Management-Natural Gas. Energy efficiency programs are offered to our natural gas customers in Illinois and Missouri. The natural gas energy efficiency programs provide incentives to customers when they purchase specific energy efficiency gas equipment, such as furnaces, boilers or manufacturing equipment. Ameren Illinois has a program approved through 2021. In 2020, it saved approximately 4,296,000 therms and avoided approximately 22,800 metric tons of Scope 1 CO₂, assuming 11.7 pounds of CO₂ per 1 therm. Ameren Missouri is engaged in implementing gas energy efficiency measures although there are no currently defined savings targets; however, in 2020 it saved about 394,000 therms and avoided approximately 2,000 metric tons of Scope 1 CO₂.

C-EU4.6

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

Ameren Missouri assets employ leak detection sensors throughout the generating units that operate using natural gas: Meramec Energy Center (Units 1&2) and Ameren Missouri Combustion Turbine Fleet. The leak detection sensors are utilized to monitor, alarm operators, and in some cases isolate methane leaks if/when they exist. Primarily these devices are utilized within turbine enclosure packages as well as specific applications where detection is employed in other areas such as our natural gas compression and cleaning systems in operation at the Maryland Height Renewable Energy Center (landfill gas to energy facility).

The 2020 Ameren Missouri Integrated Resource Plan (IRP) is designed to ensure that customers' long-term electric energy needs are met in a reliable, cost-effective and environmentally responsible manner. Ameren's preferred plan focuses on transitioning the generation fleet to a cleaner and more fuel diverse energy portfolio in a responsible manner. This transition will result in increased amounts of renewable generation and reduced amounts of fossil generation, which includes natural gas fuelled units. This should reduce methane emissions from our electric generation activities. One example is the retirement of the Meramec Energy Center which currently uses natural gas for Units 1&2. In addition, Ameren is targeting reductions in carbon emissions of 50 percent by 2030 and 85 percent by 2040 (based on 2005 levels), with a goal of achieving net-zero by 2050.

(Situation) Ameren has specific programs designed to reduce and eliminate methane emissions by building a smarter, more reliable delivery infrastructure. (Task) To reduce the highest sources of methane leaks on our natural gas delivery system, we've replaced 100% of cast and wrought iron pipeline. (Action) In addition, by the end of 2021, all unprotected pipelines will be eliminated. (Result) For example, since 2015, our Illinois and Missouri businesses have proactively replaced over 265 miles of older, leak-prone, mechanically-coupled steel and older vintage polyethylene distribution gas mains. Since 2013, Ameren has reduced underground methane leaks by 77%. In addition, Ameren uses renewable natural gas (a pipeline-quality gas derived from landfills and grain processing waste digesters to reduce the environmental impact of methane emissions). These ongoing efforts will continue to reduce future methane emissions.

Delivery and transmission. Other GHGs, such as sulfur hexafluoride (SF6) and methane, are released on a much smaller scale through the process of delivering electricity and natural gas to customers' homes and businesses. SF6 is used as an insulator for transmission equipment, such as circuit breakers, and methane is the principal component in natural gas. Our investments in smarter, cleaner, and more efficient and reliable delivery and transmission technology will continue to reduce these kinds of emissions.

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, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

24,413,651

Comment

Scope 1 emissions include: Ameren Missouri Generation, Ameren Missouri & Ameren Illinois Vehicle Fleet; Ameren Missouri equipment oil; propane usage, Ameren Illinois Natural Gas consumption for buildings; Ameren Illinois and Ameren Missouri electric distribution; and Ameren Illinois and Ameren Missouri natural gas supply.

Scope 2 (location-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

62,836

Comment

Our Scope 2 emissions are the same for location-based and market-based. Scope 2 includes electricity usage at Ameren Illinois Buildings and our headquarters.

Scope 2 (market-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

62,836

Comment

Our Scope 2 emissions are the same for location-based and market-based. Scope 2 includes electricity usage at Ameren Illinois Buildings and our headquarters.

C5.2

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

US EPA Mandatory Greenhouse Gas Reporting Rule

Other, please specify
USEPA Clean Air Act Acid Rain Program

C5.2a

(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

USEPA Clean Air Act Acid Rain Program

Ameren measures Scope 1 CO₂ emissions from its electric generation facilities by using continuous emission monitoring systems mandated by the USEPA under Title IV of the Clean Air Act. These monitors (using calibrated comparison gases) operate throughout the day, every day of the year, and are annually checked for accuracy. The CO₂ emissions from our electric generation facilities are estimated to account for more than 99% of the GHG emissions from our generation operations and more than 95% of the CO₂ emissions for the entire corporation.

Some of our generating units (predominantly oil-fired units) are considered by USEPA to be governed under Part 75 of the Clean Air Act as Low Mass Emitters, so their CO₂ emissions are conservatively determined using emission factors.

Emissions from our electric and natural gas distribution systems were determined using methods and values described in 40 CFR Part 98.

Emission factors for Greenhouse Gas Inventories from USEPA eGRID2019, February 2021 for SRMW (SERC Midwest) were used as needed.

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)

25,967,235

Start date

January 1, 2020

End date

December 31, 2020

Comment

2020 Scope 1 emissions include: Ameren Missouri Generation, Ameren Missouri & Ameren Illinois Vehicle Fleet; Ameren Missouri equipment oil; propane usage, Ameren

Illinois Natural Gas consumption for buildings; Ameren Illinois and Ameren Missouri electric distribution; and Ameren Illinois and Ameren Missouri natural gas supply.

Past year 1

Gross global Scope 1 emissions (metric tons CO₂e)

24,413,651

Start date

January 1, 2019

End date

December 31, 2019

Comment

2019 Scope 1 emissions include: Ameren Missouri Generation, Ameren Missouri & Ameren Illinois Vehicle Fleet; Ameren Missouri equipment oil; propane usage, Ameren Illinois Natural Gas consumption for buildings; Ameren Illinois and Ameren Missouri electric distribution; and Ameren Illinois and Ameren Missouri natural gas supply.

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

Our Scope 2 emissions are the same for location-based and market-based.

C6.3

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

Reporting year

Scope 2, location-based

58,106

Scope 2, market-based (if applicable)

58,106

Start date

January 1, 2020

End date

December 31, 2020

Comment

Our Scope 2 emissions are the same for location-based and market-based. Scope 2 includes electricity usage at Ameren Illinois Buildings and our headquarters.

Past year 1

Scope 2, location-based

62,836

Scope 2, market-based (if applicable)

62,836

Start date

January 1, 2019

End date

December 31, 2019

Comment

Our Scope 2 emissions are the same for location-based and market-based. Scope 2 includes electricity usage at Ameren Illinois Buildings and our headquarters.

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

All consumption at Ameren Missouri owned buildings (including electricity consumption at generation buildings) with the exception of the General Office Building

Relevance of Scope 1 emissions from this source

Emissions are relevant but not yet calculated

Relevance of location-based Scope 2 emissions from this source

Emissions are relevant but not yet calculated

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

Explain why this source is excluded

There is no metering equipment installed at these facilities to estimate their electric and natural gas consumption to include in the Scope 1 and 2 emissions summary.

C6.5

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

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

69,320

Emissions calculation methodology

Emission Intensity Factor used from 2015 Corporate and Social Responsibility Report from Peabody Energy - primary fuel supplier

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

0

Please explain

Method is using information from the primary source; however the Company derived the emission number based on the amount of coal purchased for our facilities and an estimate of the emission intensity factor using Peabody Energy data from 2015 Corporate and Social Responsibility Report (page 44)

Capital goods

Evaluation status

Relevant, not yet calculated

Please explain

Scope 3 emissions for capital goods is likely relevant. In 2020, Ameren did not calculate Scope 3 emissions for capital goods

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

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

6,063,090

Emissions calculation methodology

Emissions calculated from the generation of purchased electricity that is sold to end users. EPA eGRID emission factors were applied when generating source is unknown

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

0

Please explain

This includes purchased power for Ameren Missouri and Ameren Illinois in 2020.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

780,845

Emissions calculation methodology

Union Pacific Website - UP Carbon Emission estimator from rail delivery of coal

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

0

Please explain

Method is from the primary source - Union Pacific; however the Company derived the emission number based on the number of train deliveries and estimated distance traveled for 2020.

Waste generated in operations

Evaluation status

Relevant, not yet calculated

Please explain

Scope 3 emissions for waste generated in operations are likely relevant. In 2020, Ameren did not calculate Scope 3 emissions for waste generated in operations.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

4,434

Emissions calculation methodology

Data provided by Enterprise Holdings for vehicle rentals made by Ameren. Personal vehicle emissions for company business calculated using emission factor from USEPA Emission Factors Nov. 2015, Table 9, Passenger Car

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

24

Please explain

Enterprise Holdings rental cars are a small portion (<20%) of total miles driven for company business. USEPA Table 9 is more representative of the types of personal vehicles used for company business.

Employee commuting

Evaluation status

Relevant, not yet calculated

Please explain

Scope 3 emissions for employee commuting are likely relevant. In 2020 Ameren did not calculate Scope 3 emissions for employee commuting.

Upstream leased assets

Evaluation status

Not evaluated

Please explain

Scope 3 emissions for upstream leased assets are not evaluated.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Our product is delivered by wire or pipeline. Thus, there is no downstream issue. Actual emissions from these methods are captured in our Scope 1 emissions.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Ameren makes and delivers electricity and delivers natural gas to the ultimate consumers of these products. Thus, our products are not processed, they are simply consumed.

Use of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

6,851,973

Emissions calculation methodology

US EPA Mandatory Greenhouse Gas Reporting Rule. This value is determined in accordance with the requirements of 40 CFR Part 98 Subpart NN. The annual volume of natural gas varies base on a variety of factors, including economic and weather.

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

100

Please explain

Scope 3 emissions reported as required by 40 CFR Part 98 Subpart NN (suppliers of natural gas and natural gas liquids) for Ameren Illinois and Ameren Missouri.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Our products, electricity and natural gas, are consumed and have no end of life issues.

Downstream leased assets

Evaluation status

Not evaluated

Please explain

Scope 3 emissions for downstream leased assets are not evaluated.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

We are required to deliver energy in our franchised service territory. Thus, it is a duplication of other items as we only delivery natural gas and electricity to ultimate customers in these franchised service territories.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

Ameren makes investments in assets it will own. Thus, emissions will be captured in Scope 1 or Scope 2 after they enter service.

Other (upstream)

Evaluation status

Please explain

Other (downstream)

Evaluation status

Please explain

C6.7

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

Yes

C6.7a

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

	CO ₂ emissions from biogenic carbon (metric tons CO ₂)	Comment
Row 1	42,795	<p>2020 emissions from the Maryland Heights Renewable Energy Center (MHREC).</p> <p>The MHREC is the largest landfill-gas-to-electric facility in Missouri and one of the largest in the country. The MHREC began operation in June 2012. It has a total net summer capacity of 8 MW. This facility burns methane gas produced by the IESI Landfill in Maryland Heights, Missouri, in three Solar Mercury 50 gas turbines to produce electricity. In August 2012, the MHREC was certified as a qualified renewable energy resource by the Missouri Department of Natural Resources.</p>

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

0.00449

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

26,025,341.22

Metric denominator

unit total revenue

Metric denominator: Unit total

5,794,000,000

Scope 2 figure used

Location-based

% change from previous year

8.5

Direction of change

Increased

Reason for change

Electricity production increased and revenues were lower in 2020 compared to 2019.

Our 2020 CO₂e emissions were higher compared to 2019. The result was an increased intensity for 2020.

Intensity figure

0.661

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

26,025,341.22

Metric denominator

megawatt hour generated (MWh)

Metric denominator: Unit total

39,262,738

Scope 2 figure used

Location-based

% change from previous year

5.25

Direction of change

Increased

Reason for change

Electricity production from fossil resources increased in 2020 compared to 2019. Our 2020 CO₂e emissions were higher compared 2019. This resulted in an increase in the intensity for 2020.

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 CO ₂ e)	GWP Reference
CO ₂	25,664,447	Other, please specify Table A-1 in 40 CFR Part 98, Subpart A
CH ₄	162,218	Other, please specify Table A-1 in 40 CFR Part 98, Subpart A
N ₂ O	127,660	Other, please specify Table A-1 in 40 CFR Part 98, Subpart A
SF ₆	12,909	Other, please specify Table A-1 in 40 CFR Part 98, Subpart A

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)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	0	0	0.566	12,909	
Combustion (Electric utilities)	25,618,479	2,941	0	25,819,585.8	
Combustion (Gas utilities)	1,085	3,545	0	89,699	
Combustion (Other)	44,224	2	0	45,041.2	
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	25,967,235

C7.3

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

By business division

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Generation	25,805,555
Distribution	161,680

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 CO ₂ e	Comment
Electric utility activities	25,967,235	2020: Scope 1 emissions

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 CO ₂ e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	Renewables have no emissions.
Other emissions reduction activities	4,730	Decreased	8	Scope 2 Emissions from electricity consumption at our buildings (Ameren Missouri and Ameren Illinois). In 2020, Ameren used less electricity and a decrease in emissions.
Divestment				
Acquisitions				
Mergers				
Change in output	1,548,854.2	Increased	6.3	Scope 1 Emissions from generation activities. Electricity production in 2020 was higher than 2019. A total increase of 1,548,854.20 tons CO ₂ e compared to 2019; therefore, we calculated an increase of 6.3% as follows: $(1,548,854.20 / 24,476,487) * 100 = 6.3\%$.
Change in methodology				

Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

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 25% but less than or equal to 30%

C8.2

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

	Indicate whether your organization undertook this energy-related activity in the reporting year
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 (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	1,987,176	37,005,984	38,993,160
Consumption of purchased or acquired electricity		269,579	0	269,579
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		2,256,755	37,005,984	39,262,739

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	No
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)

Subbituminous Coal

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

1,641,736

MWh fuel consumed for self-generation of electricity

28,388,416

MWh fuel consumed for self-generation of heat

0

Emission factor

97.02

Unit

lb CO2 per million Btu

Emissions factor source

Table C-1 to Subpart C of 40 CFR Part 98

Comment

Fuels (excluding feedstocks)

Fuel Oil Number 2

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

1,251

MWh fuel consumed for self-generation of electricity

2,011

MWh fuel consumed for self-generation of heat

0

Emission factor

73.96

Unit

kg CO2 per million Btu

Emissions factor source

Table C-1 to Subpart C of 40 CFR Part 98

Comment

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

36,795

MWh fuel consumed for self-generation of electricity

261,721

MWh fuel consumed for self-generation of heat

0

Emission factor

53.02

Unit

kg CO2 per million Btu

Emissions factor source

Table C-1 to Subpart C of 40 CFR Part 98

Comment

Fuels (excluding feedstocks)

Other, please specify

Propane

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

1

MWh fuel consumed for self-generation of electricity

1

MWh fuel consumed for self-generation of heat

0

Emission factor

62.87

Unit

kg CO2 per million Btu

Emissions factor source

Table C-1 to Subpart C of 40 CFR Part 98

Comment

C-EU8.2d

(C-EU8.2d) 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)

5,514

Gross electricity generation (GWh)

28,388.42

Net electricity generation (GWh)

26,746.68

Absolute scope 1 emissions (metric tons CO2e)

25,597,267

Scope 1 emissions intensity (metric tons CO2e per GWh)

901

Comment

The 2020 reported values are based on units operating on coal at Labadie Energy Center; Meramec Energy Center (Units 3&4); Rush Island Energy Center; and Sioux Energy Center.

Emissions intensity based on gross generation.

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

Ameren does not have generating units that utilize lignite.

Oil

Nameplate capacity (MW)

292

Gross electricity generation (GWh)

2.01

Net electricity generation (GWh)

0.76

Absolute scope 1 emissions (metric tons CO₂e)

1,847

Scope 1 emissions intensity (metric tons CO₂e per GWh)

918

Comment

The 2020 reported values are based on units operating on oil at our energy centers.
Five units operate on oil.
Emissions intensity based on gross generation.

Gas

Nameplate capacity (MW)

3,418

Gross electricity generation (GWh)

261.72

Net electricity generation (GWh)

224.93

Absolute scope 1 emissions (metric tons CO₂e)

161,975

Scope 1 emissions intensity (metric tons CO₂e per GWh)

618

Comment

The 2020 reported values are based on units operating on natural gas at our energy centers. Ameren Missouri operates a fleet of nine natural gas-fired energy centers in

Missouri and Illinois, including Meramec Energy Center (Units 1&2). Emissions intensity based on gross generation.

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

Ameren does not have generating units that utilize biomass.

Waste (non-biomass)

Nameplate capacity (MW)

14

Gross electricity generation (GWh)

75.06

Net electricity generation (GWh)

62.67

Absolute scope 1 emissions (metric tons CO2e)

42,795

Scope 1 emissions intensity (metric tons CO2e per GWh)

570

Comment

The 2020 reported values are based on our landfill gas energy center: Maryland Heights Renewable Energy Center. Added to Ameren Missouri's fleet in 2012, this renewable energy center captures an otherwise untapped resource—methane gas from a landfill—and uses it to create clean, reliable electricity.

This facility removes the siloxane, hydrogen sulfides and other non-hydrocarbons prior to combustion. Additionally, energy center equipment compresses and removes moisture from the previously wasted methane from decomposing trash at the adjacent Maryland Heights landfill.

Emissions intensity based on gross generation.

Nuclear

Nameplate capacity (MW)

1,236

Gross electricity generation (GWh)

8,105.73

Net electricity generation (GWh)

7,717.6

Absolute scope 1 emissions (metric tons CO₂e)

1,671.15

Scope 1 emissions intensity (metric tons CO₂e per GWh)

0

Comment

2020 data based on our Callaway Energy Center. Nuclear is a non-carbon emitting energy resource. CO₂ Emissions reported for Callaway auxiliary boiler.

Fossil-fuel plants fitted with CCS

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

Ameren does not have fossil-fuel plants fitted with CCS.

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

Ameren does not have geothermal generating units.

Hydropower

Nameplate capacity (MW)

388

Gross electricity generation (GWh)

1,902.78

Net electricity generation (GWh)

1,889.32

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The 2020 reported values are based on our hydroelectric generation resources: Keokuk Energy Center & Osage Energy Center. Hydroelectric power is a non-carbon emitting energy resource.

Wind

Nameplate capacity (MW)

699

Gross electricity generation (GWh)

269.58

Net electricity generation (GWh)

269.58

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The 2020 reported values are based on Ameren Missouri's wind and wind power purchase agreement. Wind is a non-carbon emitting energy resource.

Solar

Nameplate capacity (MW)

8

Gross electricity generation (GWh)

9.33

Net electricity generation (GWh)

9.33

Absolute scope 1 emissions (metric tons CO₂e)

0

Scope 1 emissions intensity (metric tons CO₂e per GWh)

0

Comment

The 2020 reported values are based on Ameren Missouri's solar energy centers, Solar is a non-carbon emitting energy resource.

Marine

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

Ameren does not have marine units.

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)

0

Comment

Ameren does not have other renewable generating units.

Other non-renewable

Nameplate capacity (MW)

450

Gross electricity generation (GWh)

248.11

Net electricity generation (GWh)

93.66

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The 2020 reported values are based on Ameren Missouri's Taum Sauk Energy Center—a pumped hydroelectric energy center. The net generation includes energy input for pumping.

The generation less pumping energy is the reported net generation value. The reported net generation value is a negative value.

Total

Nameplate capacity (MW)

12,019

Gross electricity generation (GWh)

39,262.74

Net electricity generation (GWh)

36,827.2

Absolute scope 1 emissions (metric tons CO2e)

25,805,555

Scope 1 emissions intensity (metric tons CO₂e per GWh)

657

Comment

The 2020 reported values are based on Ameren's generation.
Emissions intensity based on gross generation.

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)

2,542

Annual energy losses (% of annual load)

1

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO₂e)

1,840

Length of network (km)

5,069

Number of connections

1,220,000

Area covered (km²)

52,576

Comment

Ameren Missouri transmission data reported. Connections based on approximate number of retail electric customers. Annual load data based on 2018 values.

Country/Region

United States of America

Voltage level

Transmission (high voltage)

Annual load (GWh)

4,711

Annual energy losses (% of annual load)

1

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO₂e)

3,411

Length of network (km)

7,502

Number of connections

1,220,000

Area covered (km²)

113,182

Comment

Ameren Illinois transmission data reported. Connections based on approximate number of retail electric customers.

Ameren Illinois Transmission Company (ATXI) owns 544 miles of transmission lines not reflected in this table.

Country/Region

United States of America

Voltage level

Distribution (low voltage)

Annual load (GWh)

34,168

Annual energy losses (% of annual load)

6

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO₂e)

24,744

Length of network (km)

54,914

Number of connections

1,220,000

Area covered (km²)

52,576

Comment

Ameren Missouri distribution data reported. Connections based on approximate number of retail electric customers. Annual load data based on 2018 values.

Country/Region

United States of America

Voltage level

Distribution (low voltage)

Annual load (GWh)

30,379

Annual energy losses (% of annual load)

4

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO₂e)

22,000

Length of network (km)

75,495

Number of connections

1,220,000

Area covered (km²)

113,182

Comment

Ameren Illinois distribution data reported. Connections based on approximate number of retail electric customers.

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
Wind	521,000,000	6	2025	<p>Ameren Missouri is committed to continue building a brighter energy future for our customers, the communities we serve, and our country. Together with our parent company, we have established a net-zero carbon emissions goal by 2050. In addition, we've laid out plans for our largest-ever expansion of clean wind and solar generation that maintains the reliability and affordability that customers have come to expect.</p> <p>These investments are part of our Smart Energy Plan, and include a 300 MW wind facility to be acquired in 2021 as well as some trailing cost for the acquisition of a 400 MW facility in 2020.</p>
Solar	88,000,000	1	2025	<p>Ameren Missouri is committed to continue building a brighter energy future for our customers, the communities we</p>

				<p>serve, and our country. Together with our parent company, we have established a net-zero carbon emissions goal by 2050. In addition, we've laid out plans for our largest-ever expansion of clean wind and solar generation that maintains the reliability and affordability that customers have come to expect.</p> <p>These investments are part of our Smart Energy Plan, and support plans to fund 1,200 MWs of renewables by 2025 as mentioned in our 2020 Integrated Resource Plan.</p>
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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 Lighting, Smart grid, micro-grid	Ameren Missouri Smart Grid Program: Ameren Missouri, through the Smart Energy Plan (SEP), is investing in smart technology, stronger poles and upgraded power lines to help reduce outages and respond faster when they do occur. Our \$8.4* billion plan for 2021 to 2025 will further our efforts to create a stronger, smarter, cleaner, more resilient and secure electric grid, including new, clean wind energy. As one component of SEP, Ameren Missouri expects to invest approximately \$454 million in smart grid operations. This involves deploying smart and automated switching devices and building a private fiber wireless communication network to enable the	454,000,000	5	2025

	<p>system to more rapidly detect and isolate outages, reroute power and restore service. These devices have improved reliability up to 40%.</p> <p>Smart Grid also includes investments in the LED streetlight program and the Missouri Technical Application Center (TAC). Ameren Missouri, in collaboration with communities, upgrades streetlights to energy-efficient LED bulbs. The TAC will facilitate more rapid testing of new technologies and the development of a more integrated grid. It will allow us to pilot technologies that could unlock new energy applications and potentially increase customer options.</p> <p>*2024- 2025 funding level based on assumption of extension of Senate Bill 564</p>			
Other, please specify Ameren Missouri Smart Meter Program	<p>Ameren Missouri Smart Meter Program: Ameren Missouri, through the Smart Energy Plan (SEP), is investing in smart technology, stronger poles and upgraded power lines to help reduce outages and respond faster when they do occur. Our \$8.4* billion plan for 2021 to 2025 will further our efforts to create a stronger, smarter, cleaner, more resilient and secure electric grid, including new, clean wind energy.</p> <p>One component of the SEP is installing over 1 million** smart meters between 2021 and 2024. This meter program will provide two-way communication that can more quickly pinpoint and restore outages. In addition, this program enables us to offer a suite of expanded rate options that give customers the power to choose a rate that fits their lifestyle.</p>	269,000,000	3	2025

	<p>*2024- 2025 funding level based on assumption of extension of Senate Bill 564</p> <p>** Does not include gas modules. All installations by 2024.</p>			
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C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	<p>Ameren has invested in research relating to alternative forms of generation. In 2020, Ameren spent over \$1.71 Million for CO2 emissions reduction and alternative energy generation R&D programs.</p> <p>Ameren partnered with the University of Missouri System, Capital Innovators and industry associations to invest, mentor and support energy technology startups. Through this innovative public-private partnership, Ameren invested \$1.9 million from 2017- 2019 in energy startups and technologies with the goal of meeting future needs for clean energy in our service territory. To date, over 150 jobs have been created along with an additional \$20 million in follow-on funding for these companies. Ameren is continuing our "Ameren Accelerator" efforts through EPRI's Incubatenergy Labs Network. This collaborative endeavor, consisting of over a dozen peer utilities, focuses on demonstration pilots of new technologies set to transform the energy landscape, including those that have a focus on carbon and the environment.</p>

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

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Other, please specify	Applied research and development	21-40%	1,710,000	Ameren has invested in research relating to alternative forms of generation. In 2020, Ameren

<p>CO2 emissions reduction and alternative energy generation R&D programs</p>			<p>spent over \$1.71 Million for CO2 emissions reduction and alternative energy generation R&D programs.</p> <p>Research includes the EPRI Electrification Portfolio Assessment, Social Cost of Carbon Project, Integration of Distributed Energy Program, Energy Sustainability Interest Group, Sustainability Benchmarking Project, Feasibility Study for Microgrids, Energy Storage Program, and Grid Modernization Program. In addition to EPRI activities, Ameren participated in the Missouri S&T Microgrid Consortium, The University of Illinois Distributed Generation Analysis, and the Gas Technology Institute Emerging Technology Program.</p> <p>Ameren partnered with the University of Missouri System, Capital Innovators and industry associations to invest, mentor and support energy technology startups. Through this innovative public-private partnership, Ameren invested \$1.9 million from 2017- 2019 in energy startups and technologies with the goal of meeting future needs for clean energy in our service territory. To date, over 150 jobs have been created along with an additional \$20 million in follow-on funding for these companies. Ameren is continuing our “Ameren Accelerator” efforts through EPRI’s Incubatenergy Labs Network. This collaborative endeavor, consisting of over a</p>
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				dozen peer utilities, focuses on demonstration pilots of new technologies set to transform the energy landscape, including those that have a focus on carbon and the environment. We are unable to calculate the savings from these investments.
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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	No third-party verification or assurance

C10.1a

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

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

 ERM CVS - Assurance Statement for Ameren 2021 CDP GHG Final cor 26July2021.pdf

Page/ section reference

The ERM CVS Independent Assurance Statement is attached.

Relevant standard

Other, please specify

ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).

Proportion of reported emissions verified (%)

100

C10.1b

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

Scope 2 approach

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

 ERM CVS - Assurance Statement for Ameren 2021 CDP GHG Final cor 26July2021.pdf

Page/ section reference

The ERM CVS Independent Assurance Statement is attached.

Relevant standard

Other, please specify

ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).

Proportion of reported emissions verified (%)

100

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
Stress test investments
Other, please specify
Ameren Missouri Integrated Resource Plan

GHG Scope

Scope 1

Application

The use of CO2 prices is applied to the ongoing costs for the Ameren Missouri.
Specifically those generation facilities that burn coal and natural gas.

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

1.03

Variance of price(s) used

Ameren includes a carbon price in its evaluation of long-term resource planning for its Missouri regulated business through its Integrated Resource Plan (IRP) process (i.e., Scope 1 emissions from generation). The price represents the expectation for either regulation of carbon dioxide emissions through a mechanism that establishes an explicit

price for carbon dioxide emissions, such as a carbon tax or cap-and-trade program, or through voluntary emission credit trading markets established by regional transmission organizations (RTOs) or state or regional alliances. For its 2020 IRP, Ameren Missouri used a base and high scenario price. Starting in 2025 the base price starts at \$1.13 per short ton (\$1.03 per metric ton) and escalates at approximately 43% per year for the first 5 years and then slows to an escalation of 1.5% per year thereafter. Starting in 2025 the high price starts at \$3.23 per short ton (\$2.93 per metric ton) and escalates at approximately 43% per year for the first 5 years and then slows to an escalation of 3% per year thereafter. The prices used in the IRP process are established based on discussions with Company executives involved in environmental, regulatory and legislative activities. Establishment of the carbon price assumptions includes a review of price assumptions used or produced by other utilities, policy analysts, and government agencies, including the Social Cost of Carbon estimates used by the federal government. Ameren Missouri's 2020 IRP describes in detail the process used to establish carbon price assumptions for its evaluations at that time. The same general process continues to be used. Inclusion of a carbon price affects Ameren Missouri's evaluation of both new and existing generation resources, including potential retirement of fossil generation, and also increases the cost effectiveness of energy efficiency measures.

Type of internal carbon price

Other, please specify

Explicit Price

Impact & implication

The addition of an explicit price on CO₂ raises the cost of generation on carbon emitting generation sources and by implication the market value of wholesale electricity. This assumption provides a cost advantage for any resource that does not emit CO₂ to meet the utility's obligations to serve its customers.

Ameren includes a carbon price in its evaluation of long-term resource planning for its Missouri regulated business through its Integrated Resource Plan (IRP) process (i.e., Scope 1 emissions from generation). The price represents the expectation for either regulation of carbon dioxide emissions through a mechanism that establishes an explicit price for carbon dioxide emissions, such as a carbon tax or cap-and-trade program, or through voluntary emission credit trading markets established by RTOs or state or regional alliances. For its 2020 IRP, Ameren Missouri used a base and high scenario price. Starting in 2025 the base price starts at \$1.13 per short ton (\$1.03 per metric ton) and escalates at approximately 43% per year for the first 5 years and then slows to an escalation of 1.5% per year thereafter. Starting in 2025 the high price starts at \$3.23 per short ton (\$2.93 per metric ton) and escalates at approximately 43% per year for the first 5 years and then slows to an escalation of 3% per year thereafter. The prices used in the IRP process are established based on discussions with Company executives involved in environmental, regulatory and legislative activities. Establishment of the carbon price assumptions includes a review of price assumptions used or produced by other utilities, policy analysts, and government agencies, including the Social Cost of Carbon estimates used by the federal government. Ameren Missouri's 2020 IRP

describes in detail the process used to establish carbon price assumptions for its evaluations at that time. The same general process continues to be used. Inclusion of a carbon price affects Ameren Missouri's evaluation of both new and existing generation resources, including potential retirement of fossil generation, and also increases the cost effectiveness of energy efficiency measures.

C12. Engagement

C12.1

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

Yes, our suppliers

Yes, our customers

C12.1a

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

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

1

% total procurement spend (direct and indirect)

57

% of supplier-related Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

Ameren is a member of the Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA) which collaborates with other utilities and suppliers to advance sustainable best practices in supply chain. EUISSCA created an assessment for suppliers to disclose information regarding sustainability, including water-specific aspects, and to indicate actions they are willing to take to improve.

In 2020, Ameren asked 100 suppliers to complete the assessment (representing 57% of annual spend). Suppliers are selected based on (1) top annual spend due to top suppliers having a large impact within our supply chain and (2) those having a unique position in our supply chain.

While voluntary, suppliers are incentivized to participate because the assessment offers

industry specific benchmarking information and the quantified value (e.g. financial, environmental etc) of taking certain actions, which provides suppliers a value-creating, cost-free, best-practice road map.

Impact of engagement, including measures of success

The survey demonstrates our supply base that sustainability is an initiative that Ameren cares about. We will informally recognize our top supplier(s) from the 2020 survey results.

Comment

Ameren engages our suppliers through our involvement with the EUISCA. In 2020, EUISCA sent a voluntary survey to its members top 100 suppliers to assess their commitment to sustainability (metrics include: reductions in GHG emissions, waste and water usage). This represents approximately 57% of Ameren's total 2020 supplier spend. Additional activities included Ameren's participation in the development of "Commodity Documents" that provide sustainability guidance to suppliers on specific products (wood poles, transformers, wire, Investment Recovery, etc.).

C12.1b

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

Type of engagement

Education/information sharing

Details of engagement

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

% of customers by number

50

% of customer - related Scope 3 emissions as reported in C6.5

0

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

Ameren's strategy for addressing climate change is largely embedded in Ameren Missouri's 2020 Integrated Resource Plan (IRP). The 2020 IRP outlines plans to significantly increase our renewable energy portfolio, including targeting the addition of 5,400 MW renewables by 2040. The 2020 IRP also includes the planned retirement of all coal-fired energy centers by 2042, with the retirement of the Meramec Energy Center in 2022. Further, Ameren is targeting reductions in CO2 emissions of 50 percent by 2030 and 85 percent by 2040 (based on 2005 levels), with a goal of achieving net-zero CO2 emission by 2050. More information is available at [AmerenMissouri.com/IRP](https://www.AmerenMissouri.com/IRP).

Ameren utilized a variety of communications channels and the media to announce its goal of reducing carbon emissions to net-zero by 2050. The goal was to reach Ameren Missouri customers along with other stakeholders including regulators, shareholders and employees. We recognize that our customers may belong to numerous stakeholder groups. Engaging the media was an efficient way to amplify our message. The engagement included numerous media interviews with local and nationally-based news organizations, a nationally-distributed press release and a revised website. Additionally, Ameren Missouri ran full-color advertisements in most of the largest print publications in the service territory, driving additional views and engagement to the IRP website. In Q1 and Q2 2021, Ameren Missouri's paid media efforts focused on the company's commitment to clean and carbon reduction goals. This holistic, multi-channel campaign included TV, radio, digital, social media and targeted print tactics. Messages reached co-workers through the company's intranet news page as well as letters from senior leaders. In addition, to better share information about Ameren's community impacts and to learn directly from community leaders about needs in their neighborhoods, Ameren held a "Community Voices Workshop" in October 2020.

Impact of engagement, including measures of success

Results prove the information campaign was effective. Of the traffic driven to the IRP web page, more than 75% can be attributed to campaign tactics. The video discussing Ameren's commitment to clean received an additional 42,000+ views on YouTube. Digital ads drove well over 250,000 impressions. For Ameren-owned channels, including website and social media, we achieved more than 76,000 impressions with a potential reach of nearly 3,000,000. A majority of our social media engagement is with customers who live in the St. Louis metro area in Missouri and Illinois

The impressions through media channels were likely much higher as stories highlighting the carbon reduction goal appeared in print, online and were broadcast on television and radio across the state of Missouri. The combined television market audience is more than 1.8 million households. Newspaper subscriptions in those areas surpass 100,000 homes and the media outlet's combined Facebook followers are well beyond 2 million individuals. The story went beyond local outlets in the Ameren service territory. National media outlets reported on the goals as well. These numbers are approximate as media do not share specific data on their audiences.

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
- Other

C12.3a

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Adaptation or resilience	Support	Ameren Missouri supported the "21st Century Grid Modernization and Security Act" to modernize the regulatory process for electrical corporations to more closely align the interests of electrical corporations and customers they serve by: allowing for the imposition of earnings caps, rate caps, performance standards and other customer protections; providing a meaningful opportunity for electrical corporations to recover on a timely basis the actual, prudently incurred costs of providing reliable electric service; establishing policies that encourage investment in Missouri electrical infrastructure; and providing globally competitive electric power rates for energy intensive customers.	<p>The 21st Century Grid Modernization and Security Act creates a performance-based regulatory construct for electrical corporations that provides greater certainty to both customers and electrical corporations, and fosters the provision of reliable and affordable electric services for the benefit of customers. In addition, this bill is expected to improve reliability and accelerate more efficient energy delivery systems and create opportunities for lower energy consumptions by customers and reduced line losses. This bill was approved by the Missouri Legislature in 2018.</p> <p>Ameren Missouri is executing on our Smart Energy Plan. The plan is designed to upgrade Ameren Missouri's electric infrastructure and includes investments that will upgrade the grid and accommodate more renewable energy. Investments under the plan are expected to total approximately \$8.4 billion over the five-year period from 2021 through 2025.</p>
Energy efficiency	Support with minor exceptions	Ameren actively seeks direct, open communication with various policymakers, regulators and stakeholders. Ameren has a presence in Washington, D.C., which enables constructive dialogues with members of Congress and policymakers in the federal government. The Company attempts to ensure stakeholders are provided accurate information that leads to appropriate discussions and decisions on policy issues that	<p>Ameren will continue to support energy efficiency policies where cost effective measures can be achieved.</p> <p>Ameren supports policy directions that provide solutions that are safe, reliable, affordable, and can be implemented in an environmentally responsible manner. As an example, properly crafted Clean Energy Standard may provide such a mechanism.</p>

		could impact Ameren and our customers.	
Clean energy generation	Support with minor exceptions	Ameren actively seeks direct, open communication with various policymakers, regulators and stakeholders. Ameren has a presence in Washington, D.C., which enables a constructive dialogue with policymakers in the federal government. The Company attempts to ensure policymakers are provided accurate information that lead to appropriate discussions and decisions on policy issues that could impact Ameren and our customers.	Ameren is committed to addressing climate change via legislation that properly balances environmental stewardship with reliability, customer affordability, advances in technology, community impact and jobs.

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

Edison Electric Institute (EEI)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

EEI member companies are committed to addressing the challenge of climate change. EEI member companies have significant commitments towards CO2 reductions. As the US Congress works to address this issue, it is essential to include effective consumer-protection measures that help to reduce price increases for consumers and avoid harm to U.S. industry and the economy.

How have you influenced, or are you attempting to influence their position?

Ameren serves on several committees and in leadership positions in EEI. Ameren tracks the activities of EEI and we provide input.

Trade association

American Gas Association (AGA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The AGA encourages the use of lower carbon emitting fossil fuels. The AGA is committed to reducing greenhouse gas emissions through smart innovation, new and modernized infrastructure, and advanced technologies that maintain reliable, resilient, and affordable energy service choices for consumers.

AGA works with members and leading experts to evaluate how new federal environmental regulatory proposals could impact natural gas local distribution systems and customers. AGA advocate for government rules and policies that protect the environment while allowing its natural gas utility members to continue to deliver clean, affordable natural gas to customers, safely and reliably.

How have you influenced, or are you attempting to influence their position?

Ameren serves on several committees and in leadership positions in AGA. Ameren tracks the activities of AGA and we provide input.

Trade association

Nuclear Energy Institute (NEI)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

NEI promotes a low-carbon economy using clean energy sources, such as nuclear energy, which produces carbon free electricity. Renewable technologies (e.g., wind and solar) are on the rise, NEI advocates for climate policies that ensure these technologies complement, not replace, nuclear's clean energy production.

How have you influenced, or are you attempting to influence their position?

Ameren serves on several committees and in leadership positions in NEI. Ameren tracks the activities of NEI and we provide input.

Trade association

National Association of Manufacturers (NAM)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

"The NAM supports the objectives of the Paris Climate Agreement to significantly reduce the risks and impacts of global climate change. Manufacturers are committed to helping address climate change while increasing the global competitiveness of U.S. industries.

U.S. manufacturers are leading and the results have been unprecedented: we are significantly more carbon efficient than most of our global competitors, and the U.S. has reduced its total GHG emissions more than any other nation. We are committed to being part of the solution and encourage all other sectors of the American economy to join us. Manufacturers are advocating for policies that encourage domestic emissions reductions so that the U.S. continues to lead on the global stage, driving our International counterparts to do the same.

All sectors of the global economy will have to do their part to limit global GHG emissions. U.S. manufacturers are both creators and users of the technologies that will be vital to reducing global emissions. Accordingly, sound policy for U.S. manufacturers is one that reduces emissions while maintaining their global competitiveness. Policymakers should pursue policies that achieve meaningful, cost-effective GHG reductions while empowering U.S. manufacturers to thrive in the global marketplace and ensuring the affordable, reliable energy supplies needed to keep our economy strong."

How have you influenced, or are you attempting to influence their position?

Ameren is actively engaged. Ameren tracks the activities of NAM and we provide input.

Trade association

Alliance for Transportation Electrification

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

"The Alliance for Transportation Electrification is a broad and diverse coalition of organizations that advocate for an acceleration of transportation electrification in all States across the country. The Alliance believe that a multi-stakeholder coalition educating and promoting the benefits of transportation electrification is necessary and will benefit the public welfare in the States."

How have you influenced, or are you attempting to influence their position?

Ameren is actively engaged on electric transportation issues and we serve on the Board. Ameren tracks the activities of the Alliance for Transportation Electrification and we provide input.

C12.3d

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

Yes

C12.3e

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

Ameren values consistent dialogue with all our stakeholders, including customers, regulators, co-workers and investors. We regularly engage in discussions with, and provide comprehensive information for, constituents interested in our corporate governance, stewardship and environmental compliance. We are receptive to stakeholder concerns, and we are committed to transparency and proactive interactions with our investors. We regularly communicate with our stakeholders to better understand their viewpoints, gather input on our business strategy and execution and obtain feedback regarding other matters of interest. The feedback received from our outreach efforts is shared with senior management and our Board of Directors.

In 2020 and early 2021, we reached out to over 35 shareholders and offered to engage on ESG-related topics, as well as any other topics of interest. We engaged with a broad range of shareholders, including index funds, union and public pension funds, actively managed funds and socially-responsible investment funds, as well as shareholder advisory firms. Key topics for shareholder engagement included climate-related matters, executive compensation, cybersecurity, human capital management and corporate culture, and Board leadership structure, as well as how these topics tie to our long-term strategy. Participants in these engagements included our Chairman and CEO; CFO; SVP General Counsel and Secretary; VP, Sustainability and Electrification; Senior Director, Environmental, Innovation, Strategy and Analysis, and Director, Investor Relations. In addition, our investor relations group leads our management team in hundreds of investor meetings throughout the year.

In 2021, Ameren was recognized by Diversity Inc a top company for ESG for second consecutive year.

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?

Ameren's board of directors, currently comprised of 12 independent board members and Ameren's CEO and chairman, oversees environmental policy matters and strategies, including those related to planning for the potential implications of climate-related issues. Ameren's board has a diverse range of skills that make it well-positioned to address the risks and opportunities associated with climate change. Management-level oversight of environmental, social and governance matters, including climate matters, is comprised of our Corporate Social Responsibility Executive Steering Committee, which is led by the vice president, sustainability and electrification, and our Executive Leadership Team. In addition, a variety of management teams throughout our organization plan and execute our risk strategy, as well as coordinate with internal and external subject matter experts to inform the Board and company leadership

of specific issues. Working together, these teams are constantly anticipating, monitoring and adjusting to prepare for risks and identifying opportunities to protect and benefit stakeholders and the future of Ameren.

Ameren and its subsidiaries, including Ameren Missouri and Ameren Illinois, communicate positions on climate and the environment to co-workers, industry peers, regulators and other stakeholders. The company's Sustainability & Electrification group recently brought together a cross-functional team from across Ameren to produce the company's second report addressing climate risk, titled "Committed to Clean: Transformational Changes Towards Net-Zero" (2021 Climate Report), which is available on the company's website. The report is based on the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) and it outlines how Ameren's climate goals and transition plan, including clean energy additions and existing coal energy center retirements, are consistent with the goals of the Paris Agreement and of limiting global temperature rise to 1.5° Celsius. The report is a clear articulation of the company's plans to address climate change. It includes building new clean energy sources and retiring old energy centers while setting explicit carbon reduction goals. This climate report was shared in a number of forums, including engagement with relevant trade associations, investors and media across the country.

In addition, an internal climate policy team guides climate-related corporate strategy and policy including external and advocacy. The team comprises senior leaders and subject matter experts and meets on a regular basis to coordinate and discuss climate policy matters. Thus, providing a platform to ensure consistency across the company.

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

 2020-AEE-Annual-Report.pdf

Page/Section reference

2020 Ameren Annual Report, Form 10-K
Annual Report (pg 3-9)
2020 Form 10-K (pg 36)

Content elements

Governance
Strategy
Risks & opportunities
Emission targets

Comment

The Annual Report provides financial information and highlights the Company's CO2 goals.

Publication

Other, please specify
In voluntary communications, in line with TCFD recommendations

Status

Complete

Attach the document

 climate-report-tcfd.pdf

Page/Section reference

Entire report

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

Committed to Clean: Transformational Changes Toward Net-Zero: Ameren's 2021 climate risk report is based on recommendations from the Task Force on Climate-related Financial Disclosures (TCFD). This report provides information about the company's management of climate-related risks and opportunities, including its expansive plan to add 5,400 MW of clean energy in the coming decades. It also details how that plan is consistent with meeting the 1.5° Celsius goal, the target established by the Paris Agreement.

Publication

In other regulatory filings

Status

Complete

Attach the document

 Ameren Missouri 2020 IRP ch1-executive-summary.pdf

Page/Section reference

2020 Ameren Missouri Integrated Resource Plan. Attached is the Executive Summary. More information is available at AmerenMissouri.com/IRP.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Ameren Missouri Integrated Resource Plan. A 20-year plan that supports cleaner energy in Missouri, including major expansions of solar and wind power. The IRP, which is filed every three years, describes our preferred approach to meeting electric customers' projected long-term energy needs in a cost-effective fashion that maintains system reliability as we move to cleaner and more diverse sources of energy generation.

Publication

In voluntary sustainability report

Status

Complete

Attach the document

 Ameren 2021 Sustainability Report.pdf

Page/Section reference

2021 Ameren Sustainability Report, Leading the Way to a Sustainable Energy Future. See entire report.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

2021 Sustainability Report: Ameren's latest sustainability report covers Ameren's progress in 2020, including establishing a net-zero carbon emissions goal and substantial investments in clean energy. The report details how funding from AmerenCares and programs supported by Ameren's Illinois and Missouri regulators resulted in Ameren providing more than \$23 million to help those in need in the communities we serve in both Missouri and Illinois during the pandemic. It also updates the company's diversity, equity and inclusion initiatives; ESG governance practices; and plans for sustainable growth.

Also, the report includes Ameren's business activities mapped to the United Nations Sustainable Development Goals, which address the global challenges society faces. This inaugural effort also reflects Ameren's collaboration with the Electric Power Research Institute to identify the sustainability issues most important to the company and its stakeholders.

Publication

In voluntary communications

Status

Complete

Attach the document

 2021 Ameren -EEI-AGA_ESG_Sustainability_Template.pdf

Page/Section reference

EEI AGA ESG Sustainability Template – Version 2. See entire report.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Ameren is participating in the EEI AGA ESG/Sustainability Report, a voluntary industry initiative coordinated by the Edison Electric Institute (EEI) and the American Gas Association (AGA) to provide electric industry investors with more uniform and consistent environmental, social, governance and sustainability-related (ESG/sustainability) metrics.

Publication

In voluntary communications

Status

Complete

Attach the document

 Ameren-ESG-Investor-Deck-May-2021-FINAL.pdf

Page/Section reference

Ameren ESG Investor Presentation: Leading the Way to a Sustainable Energy Future (May 2021). See entire presentation.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

The Ameren ESG Investor presentations provides a comprehensive view of Ameren's commitment to operating in a sustainable manner and is doing this by carefully balancing our key responsibilities to our customers and the communities we serve, our co-workers, our shareholders, and the environment. Our ability to achieve our mission, "To Power the Quality of Life," and our vision, "Leading the Way to a Sustainable Energy Future", is directly linked to four key sustainability pillars: environmental stewardship, social impact, governance and sustainable growth. The reports and presentations below discuss the actions we are taking to benefit the climate, invest in renewable energy and drive changes that support our commitment to social responsibility, including efforts relating to diversity, equity and inclusion, human capital management, and health and safety programs.

C15. 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.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Executive Vice President & Chief Financial Officer, Ameren President, Ameren Services	Chief Financial Officer (CFO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms

Independent Assurance Statement to Ameren Corporation

ERM Certification and Verification Services ('ERM CVS') was engaged by Ameren Corporation to provide limited assurance in relation to specified 2020 (year ending December 31st 2020) GHG data in its 2021 CDP Climate Change Questionnaire as set out below.

Engagement summary	
Scope of our assurance engagement	<p>Whether the 2020 data for the specified indicators listed below are fairly presented in accordance with the reporting criteria:</p> <ul style="list-style-type: none"> Total Scope 1 GHG emissions (absolute) [metrics tons CO₂e] <ul style="list-style-type: none"> Sources include Ameren Missouri generation, Ameren Missouri & Ameren Illinois vehicle fleet, Ameren Missouri equipment oil, propane usage, Ameren Illinois natural gas consumption for buildings, Ameren Illinois & Ameren Missouri electric distribution, and Ameren Illinois & Ameren Missouri natural gas supply Total Scope 2 GHG emissions (absolute) (location-based) [metric tons CO₂e] <ul style="list-style-type: none"> Sources include Ameren Illinois buildings and Ameren headquarters
Reporting criteria	US EPA Mandatory GHG Reporting Rule and Ameren's internal reporting criteria and definitions (where relevant).
Assurance standard	ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).
Assurance level	Limited assurance.
Respective responsibilities	<p>Ameren is responsible for preparing the data and for its correct presentation in the Report to third parties, including disclosure of the reporting criteria and boundary.</p> <p>ERM CVS' responsibility is to provide conclusions on the agreed scope based on the assurance activities performed and exercising our professional judgement.</p>

Our conclusions

Based on our activities, nothing has come to our attention to indicate that the 2020 data for the selected GHG data as shown below and reported in section C6.1 and C6.3 of Ameren's 2021 CDP Climate Change Questionnaire are not fairly presented, in all material respects, with the reporting criteria.

- Total Scope 1 GHG emissions: 25,967,235 metric tons CO₂e**
- Total Scope 2 GHG emissions (location-based): 58,106 metric tons CO₂e**

Emphasis of matter

Without affecting our conclusion, which is not modified, we draw attention to the exclusion of electricity use at electricity generation facilities from the reported Scope 2 GHG emissions referred to in section C.6.4.a, which should be read in conjunction with the reported data.

Our assurance activities

Our objective was to assess whether the assured data are reported in accordance with the principles of completeness, comparability (across the organization) and accuracy (including calculations, use of appropriate conversion factors and consolidation). We planned and performed our work to obtain all the information and explanations that we believe were necessary to provide a basis for our assurance conclusions. We applied a 5% material error threshold.

A multi-disciplinary team of GHG and assurance specialists performed the following activities:

- Virtual interviews with corporate staff to understand and evaluate the data management systems and processes (including IT systems and internal review processes) used for collecting and reporting the selected data;
- A review of the data against the continuous emissions monitoring system (CEMS) data reported to US EPA;
- A review of the calculations of the GHG emissions from underlying activity data, including the conversion factors and emission factors used, and the accuracy of the consolidation of the GHG data at the corporate level; and
- A review of the results of Ameren's internal QA/QC procedures on the GHG emissions.

The limitations of our engagement

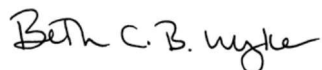
Our engagement covers the following sources for:

- Scope 1: Ameren Missouri generation, Ameren Missouri & Ameren Illinois vehicle fleet, Ameren Missouri equipment oil, propane usage, Ameren Illinois natural gas consumption for buildings, Ameren Illinois & Ameren Missouri electric distribution, and Ameren Illinois & Ameren Missouri natural gas supply
- Scope 2: Ameren Illinois buildings and Ameren headquarters.

The reliability of the assured data is subject to inherent uncertainties, given the available methods for determining, calculating or estimating the underlying information. It is important to understand our assurance conclusions in this context.

Force Majeure – COVID-19

Due to travel restrictions as a result of COVID-19, our assurance work for the reporting period was conducted using a combination of desk-based reviews of information and data, and virtual interviews and meetings with the Ameren corporate and plant-level reporting team. We did not undertake any in-person visits to Ameren operations.



Beth Wyke
Partner, Head of Corporate Assurance
26 July 2021



ERM Certification and Verification Services, Inc.
email: post@ermcvs.com

ERM CVS is a member of the ERM Group. The work that ERM CVS conducts for clients is solely related to independent assurance activities and auditor training. Our processes are designed and implemented to ensure that the work we undertake with clients is free from bias and conflict of interest. ERM CVS staff that have undertaken this engagement work have provided no consultancy related services to Ameren Corporation in any respect.