Welcome to your CDP Climate Change Questionnaire 2022

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 whose primary assets are its equity interests in its subsidiaries. Ameren's principal subsidiaries are 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 in Illinois and Missouri. Ameren's net generating capacity, all of which is owned by AMO, was approximately 10,800 MWs as of 12/31/21. In 2021, AMO's energy supply was approximately 73% from coal, 11% from nuclear, 4% from hydro, 4% from wind, <1% from methane gas and solar, <1% from purchased wind, 1% from natural gas and 7% from purchased power. In 2021, Ameren had total annual operating revenues of more than $6.39B. 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 2022, we released the 2022 Ameren Sustainability Report (available at Ameren.com/Sustainability), which offers a comprehensive view of our actions on key ESG matters. Ameren 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.

Ameren's 2021 year end rate base consisted of approximately 75% from electric and natural gas distribution investments, 10% coal generation, 6% nuclear generation, 2% gas generation, and 7% 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 2020 IRP, updated in June 2022, which outlines plans to retire more than 3,500 MWs of fossil-fired generation by 2030. We plan to add 2,800 MW of additional new, clean, renewable (wind and solar) generation by 2030 and a total of 4,700 MW by 2040. Also, we plan to add 800 MW of battery storage. To maintain energy reliability and resiliency for customers after the retirement of three coal-fired energy centers by the end of 2030, the company plans a 1,200 MW combined-cycle energy center to be in service by 2031.Ameren has a goal of achieving net-zero GHG emissions by 2045. This goal includes both Scope 1 and 2 emissions including other GHG emissions of CH4, N2O and SF6, and encompasses direct emissions from operations, as well as electricity usage at Ameren buildings. The company also has strong interim goals including a 60% reduction by 2030, and an 85% reduction by 2040, as compared to 2005 levels. More information is available at Ameren.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, 2021, 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
Reporting year	January 1, 2021	December 31, 2021	No

C0.3

(C0.3) Select the countries/areas in which you operate.

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

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	Ameren Corporation Ticker Symbol is AEE.
Yes, an ISIN code	US0236081024
Yes, a CUSIP number	023608102

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Board-level committee	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 depth and range of skills that make it well-positioned to address the risks and opportunities associated with environmental, social and governance issues. These include extensive energy industry, operational, strategic planning, financial, cyber, and regulatory experience, as well as environmental, sustainability and legal expertise. The NOESC 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. Case Study: Net-Zero Target (Situation)We recognize climate change is a critical issue for our customers and stakeholders.(Task)Management evaluates emissions reductions targets and related pathways to achieve such reductions. (Action)In June 2022, Ameren established a goal of achieving net-zero carbon emissions by 2045. This goal includes both Scope 1 and 2 emissions including other greenhouse gas emissions of CH4, N2O and SF6, and encompasses direct emissions from operations, as well as electricity usage at Ameren buildings. Ameren is also targeting a 60% emissions reduction by 2030 and an 85% reduction by 2040 based 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 goals were discussed with the Board of Directors.(Result)Details of the company goal are available publicly at ameren.com/IRP.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	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 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. 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. 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. The Human Resources Committee oversees executive compensation practices and policies, including the integration of environmental, social and governance measures.

		The Finance Committee oversees and reviews major capital projects, including projects related to environmental (climate) compliance. Case Study: Net-Zero Target (Situation)We recognize climate change is a critical issue for our customers and stakeholders.(Task)Management evaluates emissions reductions targets and related pathways to achieve such reductions. (Action)In June 2022, Ameren established a goal of achieving net-zero carbon emissions by 2045. This goal includes both Scope 1 and 2 emissions including other greenhouse gas emissions of CH4, N2O and SF6, and encompasses direct emissions from operations, as well as electricity usage at Ameren buildings. Ameren is also targeting a 60% emissions reduction by 2030 and an 85% reduction by 2040 based 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 goals were discussed with the Board of Directors.(Result)Details of the company goal are available publicly at ameren.com/IRP.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	Several members of the Ameren Board of Directors have qualifications and experiences that create competence on climate-related issues. These include extensive executive management and leadership experience at companies with significant environmental compliance and sustainability initiatives, including in the utilities, global security and aerospace, and manufacturing industries.

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 or climate-related issues, including (i) Senior Vice President – Strategy, Innovation, Sustainability & Risk , 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 to the CEO (iv) Chief Sustainability and Diversity Officer (CSDO), who reports to the CEO and (v) operating subsidiary Presidents, who reports to the CEO. Our CFO also reports directly to our CEO. Our strategy and actions are subject to stringent governance requirements.
Ameren maintains a Sustainability Executive Steering Committee to lead Ameren's enterprise-wide sustainability/ESG responsibility efforts including providing input to our strategy and advocating for a culture of sustainability among co-workers and suppliers. In 2022, Ameren further emphasized the importance of managing ESG and climate-related issues by establishing a CSDO who reports to the CEO. The CSDO 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 executive leadership and other pertinent management functions.

We have 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., sustainability, environmental, innovation, and corporate planning teams report to the SVP of Strategy, Innovation, and Sustainability & Risk or CSDO). 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 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, including the CEO. 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. This report will be updated based on the 2022 Ameren Missouri Integrated Resource Plan Update.

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
Corporate executive team	Monetary reward	Emissions reduction project	The Ameren Long-Term Incentive Program (LTIP) is intended to reward the corporate executive team for their contributions to Ameren's long-term success by providing the opportunity to earn shares of Ameren Common Stock. 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, MW) 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 metric is aligned with Ameren's commitment to strong environmental stewardship and executing a balanced and flexible generation strategy.

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 Sustainability department leads efforts on ESG, climate-related issues and shareholder advocacy efforts. Our Sustainability Executive Steering Committee leads Ameren's enterprise-wide sustainability/ESG efforts, including providing input to our strategy. In 2022, Ameren further emphasized the importance of managing ESG and climate-related issues by establishing a Chief Sustainability & Diversity Officer.

An example of how transitional climate-related risks and opportunities are managed at Ameren is demonstrated through the development of the 2022 update to the Ameren Missouri Integrated Resource Plan (IRP).The IRP is designed to ensure that customers' long-term energy needs are met in a reliable, cost-effective and environmentally responsible manner. In June 2022, Ameren Missouri filed its 2020 IRP Update 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 2,800 MW of renewable generation by the end of 2030 and a total of 5,400 MW of renewable generation by 2040. Ameren's company-wide goal of reducing emissions by 60% by 2030, 85% by 2040, and net-zero by 2045 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	Electric and gas utilities are highly regulated. Current and emerging regulations, including those related to climate change are systematically analyzed through our ERM program. 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 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. As of December 31, 2021, Ameren Missouri's coal-fired energy centers represented 10% of Ameren's rate base. Our five-year plan (2022-2026) to invest $17.3 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.
Emerging regulation	Relevant, always included	Electric and gas utilities are highly regulated. Current and emerging regulations, including those related to climate change are systematically analyzed through our ERM program. 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 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. As of December 31, 2021, Ameren Missouri's coal-fired energy centers represented 10% of Ameren's rate base. Our five-year plan (2022-2026) to invest $17.3 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.
Technology	Relevant, always included	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. 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.

		Lastly, as Ameren works to enhance and expand the digital intelligence and automation capability of its distribution grid, we observe that the technology products available to the utility industry today are more complex, broader in scope, and developing at a faster rate than ever before. Illinois' Technology Application Center in Champaign and Missouri's similar testing location currently under development in St. Louis County are Ameren-owned assets dedicated to the comprehensive testing, validation, and support of grid-based technologies.
Legal	Relevant, always included	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. A recent decision by the United States Supreme Court adds to the uncertainty as significant regulatory action in the absence of clear Congressional authorization could result in legal challenges. The changing nature of international efforts, recessionary forces and the uncertainty around domestic rules and regulations, such as those outlined below, highlights the challenges we face in predicting energy policy, particularly climate energy policies. Evolving energy policies and regulations could impact adjustments to our generation transition plan including the timing of 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 customers 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.
Market	Relevant, always included	Our businesses are dependent on our ability to access the capital markets successfully. Access to sufficient capital in the amounts at the times and terms needed, is crucial. We rely on the issuance of short-term and long-term debt and equity as significant sources of liquidity and funding for capital requirements not satisfied by our operating cash flow, as well as to refinance existing long-term debt. The inability to

		raise debt or equity capital on reasonable terms, or at all, could negatively affect our ability to maintain and expand our businesses. Events beyond our control, such as depressed economic conditions or extreme volatility in the debt, equity, or credit markets, might create uncertainty that could increase our cost of capital or impair or eliminate our ability to access the debt, equity, or credit markets, including our ability to draw on bank credit facilities. Any adverse change in our credit ratings could reduce access to capital and trigger collateral postings and prepayments. Such changes could also increase the cost of borrowing which could adversely affect our results of operations, financial position, and liquidity. Ameren continues to monitor and actively participate in local and federal policy discussions that will affect changes in market operations and the markets successful transition to cleaner energy. The market risks associated with the availability and costs of raw materials and the significant need for new transmission infrastructure in our service territory and across the nation can all have an impact on Ameren's decisions and approach for providing safe, reliable, and affordable energy to our customers.
Reputation	Relevant, always included	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. 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 though Ameren Missouri's Integrated Resource Plan (IRP) as updated in June 2022. The 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 emissions 60% by

		2030, 85% by 2040, and net-zero by 2045. Through implementing our strategy to significantly reduce carbon emissions, we strongly believe that we are effectively mitigating reputational risks associated with climate change.
Acute physical	Relevant, always included	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. 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 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. 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 fulfilment 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. 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.
Chronic physical	Relevant, always included	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. Ameren's primary means of mitigating the physical risks associated with extreme weather events is to make certain asset enhancements and improvements are implemented, commonly known as "system hardening," to avoid potential impacts

		and damages that may otherwise occur. At the same time, we deploy a multifaceted strategy to ensure the reliability and stability of the grid, from the energy center to the customer. This strategy includes system hardening and three distinct and complementary levels of planning and execution – emergency planning, situational awareness and emergency response – all in support of asset protection, system reliability and resiliency. We believe the combination of these measures can address the most severe potential impacts posed by changes in near-term weather patterns and longer-term climate trends.

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?

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) 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, as updated in June 2022, 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 4,700 MWs of renewable generation by 2040.

Ameren is targeting reductions in emissions of 60 percent by 2030 and 85 percent by

2040 (based on 2005 levels), with a goal of achieving net-zero emissions by 2045. More information is available at Ameren.com/IRP.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Unknown

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

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) 2022 Integrated Resource Plan (IRP) Update.

Cost of response to risk

7,500,000,000

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 June 2022, 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 4,700 MWs of wind generation by 2040.
A total addition of 4,700 MWs of renewables by 2040 represents the investment opportunity of ~$7.5 billion.

More information is available at Ameren.com/IRP.

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 for labor and materials, 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 2022 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.

Comment

More information is available at AmerenMissouri.com/IRP.

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) 2022 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 June 2022, 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 4,700 MWs of renewable generation by 2040.

Ameren has a goal to reduce emissions 60% by 2030 and 85% by 2040, compared to 2005 levels and targets net-zero carbon emissions by 2045. More information is available at Ameren.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)

7,500,000,000

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 4,700 megawatts (MW) by 2040 of renewable generation (representing an investment of approximately $7.5 billion).

Cost to realize opportunity

7,500,000,000

Strategy to realize opportunity and explanation of cost calculation

The potential financial impact represents Ameren Missouri pursuing ownership of a total of 4,700 MW by 2040 of renewable generation (representing an investment of approximately $7.5 billion).

Comment

Ameren's strategy for addressing climate risk is largely embedded in Ameren Missouri's 2022 Integrated Resource Plan (IRP) Update.
Targeting net-zero emissions by 2045
• Expect to add 2,800 MW of renewable generation by 2030 and 4,700 MW by 2040. Also, we plan to add 800 MW of battery storage. To maintain energy reliability and resiliency for customers after the retirement of three coal-fired energy centers by the end of 2030, the company plans a 1,200 MW combined-cycle energy center to be in service by 2031. 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.

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

Row 1

Transition plan

Yes, we have a transition plan which aligns with a 1.5°C world

Publicly available transition plan

Yes

Mechanism by which feedback is collected from shareholders on your transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

The Company maintains an active shareholder engagement program to ensure regular communication with shareholders regarding areas of interest or concern. Each year, we conduct outreach to shareholders owning a significant percentage of our outstanding shares of Common Stock, in addition to presentations at industry and financial conferences and meetings with analysts and investment firms.

The Company's engagement efforts include investor meetings specifically focused on its sustainability initiatives, including environmental stewardship, social impact, and governance practices, including executive compensation, risk management and oversight.

In 2021 and early 2022, we reached out to over 80 shareholders and offered to engage on ESG-related topics, including climate-related topics and our transition plan, as well as any other topics of interest. We received positive responses. We engaged with a broad range of shareholders, actively managed funds and socially-responsible investment funds. Key topics for shareholder engagement included climate-related matters, 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 CEO; CFO; SVP General Counsel and Secretary; Chief Sustainability and Diversity Officer; Senior Director, Environmental 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.

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your transition plan (optional)

C3.2

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

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a

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

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios IEA 2DS	Company-wide		Ameren's strategy for addressing climate risk is largely embedded in AMO's 2022 IRP Update. 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 NRDC and Bloomberg New Energy Finance. 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 AMO'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. 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. Our current plan to achieve net-zero by 2045, with interim reductions of 60% by 2030 and 85% by 2040, based on 2005 levels, is consistent with limiting temperature rise to 1.5 °C by 2050.
Physical climate scenarios Bespoke physical scenario	Company-wide	Unknown	Global climate change can impact temperatures, precipitation, changes in water availability across the United States, including in the Midwest and Great Plains regions. The effects of climate change will vary depending on location, and the implications of these effects will vary for different parts of the Ameren organization and supply chain. The Ameren Water Resilience Report (Report) assesses the current and future availability of water resources across a broad region, including the Midwest and Great Plains under a variety of potential climate change scenarios. The Report focuses on natural factors and how changes in temperature and precipitation due to climate change may influence water resources and water availability. The area in

			this Report included the Upper Mississippi Water Resources Region and the lower Missouri Water Resources Region, which represents Ameren's service area, as well as specific portions of the Powder River Basin in Wyoming, which represents a key portion of Ameren's supply chain. Scientific literature and available online tools and datasets were reviewed in order to assess historical climate observations and projected climate trends for all three of these focus regions. Significant climate change factors, including temperature, precipitation, extreme weather events, and changes in water availability were used to document how historical trends relate to future projections incorporating climate models. Based on the climate change tools and datasets, concluded that for the time period around 2030 water stress is projected to be near normal for most regions within the study area, but is likely to increase in the already arid Powder River Basin. Average annual precipitation has been variable to increasing, but is projected to increase in the future across all three watersheds. Flooding has been increasing and is projected to continue to increase in the study area; however, flooding is more variable both historically and projected in Powder River Basin. Drought has been variable historically, but is projected to increase across all three watersheds. The Report is available at https://s21.q4cdn.com/448935352/files/doc_downloads/2020/09/Water-Resiliency-and-Risk-Assessment.pdf.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

We recognize that climate change is a critical issue for our customers, our communities, our nation and our planet. We are committed to doing our part to protect and preserve the environment as described in this report. It provides a comprehensive look at the steps Ameren is taking to manage our climate-related risks – including policy and legal, physical, reputational, technology, market, and financial risks – while continuing to meet our goal to provide safe, reliable and affordable energy to serve our customers.

To address and respond to climate risk, we 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. To a lesser

extent, our 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 total GHG emissions.

Key focal questions include: What is our customers' peak demand and energy consumption expected over the next 20 years and what is the best way to meet that demand and energy consumption? Is our plan consistent with Paris objectives or not?

Results of the climate-related scenario analysis with respect to the focal questions

As we have continued to evaluate climate risks, we have increasingly focused on contributing to the achievement of a goal of limiting global average temperature rise to no more than 1.5°C, the target established by the Paris Agreement. To help us assess the resilience of Ameren Missouri's 2020 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.

Our strategy for addressing climate risk, which is largely embedded in Ameren Missouri's IRP, as updated in June 2022, is expected to deliver significant reductions in carbon emissions by the end of the decade, with the goal of ultimately reaching net-zero carbon emissions by 2045, while effectively balancing customer affordability and reliability, and managing related risks. We believe that the plan set forth in our IRP coupled with other plans will enable us to effectively achieve our goals.

To test the resilience of our IRP, we compared our expected emission reductions under that plan to the emission pathways analyzed by EPRI. These emissions pathways, which represent estimated
global annual carbon dioxide emissions levels over a given period of time, included hundreds of emissions pathways published by the IPCC, the United Nations body that assesses the science related to climate change.

Based on this analysis, we believe that our projected emissions are consistent with limiting global temperature rise to 1.5 degrees Celsius (1.5°C). We believe our plan transitions our generation fleet to a cleaner and more diverse portfolio in a responsible

fashion.

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	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. Ameren's strategy for addressing climate risk is largely embedded in AMO's Integrated Resource Plan (IRP). The current IRP, as updated June 2022, 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 4,700 MWs of wind generation by 2040. Also, we plan to add 800 MW of battery storage by 2040. To maintain energy reliability and resiliency for customers after the retirement of three coal-fired energy centers by the end of 2030, the company plans a 1,200 MW combined-cycle energy center to be in service by 2031. Ameren has a goal to achieve net-zero GHG emissions by 2045, and interim emissions reductions of 60% by 2030, 85% by 2040 and Net-Zero by 2045, based on 2005 levels. More information is available at AmerenMissouri.com/IRP.
Supply chain and/or value chain	Yes	Ameren's risk management department has policies to address fuel price volatility and supply chain risks, including related to. 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	Ameren has invested in research relating to alternative forms of generation. In 2022, Ameren spent over $2.36 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 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.
Operations	Yes	Ameren develops action plans that mitigate risk, manage long-term customer costs and improve shareholder value. As of December 31, 2021, Ameren Missouri's coal-fired energy centers represented 10% of Ameren's rate base. By year end of 2026, we estimate our rate base will include 84% from electric and natural gas transmission and distribution investments with coal generation declining to 6%. 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.

		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. Ameren's strategy for addressing climate risk is largely embedded in AMO's Integrated Resource Plan (IRP). The current IRP, as updated June 2022, 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 4,700 MWs of wind generation by 2040. Also, we plan to add 800 MW of battery storage by 2040. To maintain energy reliability and resiliency for customers after the retirement of three coal-fired energy centers by the end of 2030, the company plans a 1,200 MW combined-cycle energy center to be in service by 2031. Ameren has a goal to achieve net-zero GHG emissions by 2045, and interim emissions reductions of 60% by 2030, 85% by 2040 and Net-Zero by 2045, based on 2005 levels. More information is available at AmerenMissouri.com/IRP.

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	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.

		Our strategy addresses: 1. Electric Generation. We are transitioning our generation fleet to cleaner resources, as set forth in Ameren Missouri's 2022 Integrated Resource Plan (IRP or "plan"). This plan is consistent with achieving our goal of net-zero carbon emissions by 2045. 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 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. 7. Other Non-Energy Center Emissions. We are promoting customer programs related to renewable energy and electrification of transportation. 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 GHG emissions by 2045, 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 June 2022, 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 2,800 MW of renewable generation by the end of 2030. Ameren has a goal of achieving net-zero GHG emissions by 2045 and is targeting a 60% emissions reduction by 2030, 85% by 2040, as compared to 2005 levels. More information is available at AmerenMissouri.com/IRP. Capital expenditures/capital allocation to support the implementation of Ameren's investment strategy are factored into Ameren's financial planning and risk management processes and are regularly considered. 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 $18 billion (Ameren Missouri – up to $9.2 billion; Ameren Illinois – up to $8.6 billion; ATXI – up to $0.2 billion) of capital expenditures from 2022 through 2026. Ameren Missouri's IRP, as updated in June 2022, outlined plans to significantly increase its renewable energy portfolio, including the addition of 2,800 MW of renewable generation by the end of 2030 and 4,700 MW by the end of 2040, representing a total investment opportunity of $7.5 billion. The IRP also includes the addition of a 1,200 MW combined-cycle facility and 800 MW of battery storage by 2040, representing investment opportunities of $1.7 billion and $650 million, respectively. For more information see Ameren's 2021 Annual Report on Form 10-K for the year ended December 31, 2021 and other reports filed with the Securities and Exchange Commission.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?

Yes

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's transition to a 1.5°C world.

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

2022

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

Base year

2005

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

Target year

2030

Targeted reduction from base year (%)

60

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

28,229,889

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

74,981

Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

28,304,870

% of target achieved relative to base year [auto-calculated]

Target status in reporting year

Underway

Is this a science-based target?

No, but we are reporting another target that is science-based

Target ambition

Please explain target coverage and identify any exclusions

More than 99% of Ameren’s direct GHG emissions occur as a result of operations of Ameren Missouri's fossil-fueled energy centers. In 2022, 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 2045, including aggressive interim goals to reduce carbon emissions below 2005 levels by 60% 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. Our net-zero emissions goal is consistent with the objectives of the Paris Agreement and limiting global temperature rise to 1.5°C . Therefore, we consider this a science-based target.

The 2005 base year emissions will be updated to include CO2e for Scope 1 and 2.

% target achieved: 32% [% Difference: 2005 to 3-YR Average (2019-2021) Ameren Corporation CO2 Emissions]

The target is underway.

Plan for achieving target, and progress made to the end of the reporting year

More than 99% of Ameren’s direct GHG emissions occur as a result of operations of Ameren Missouri's fossil-fueled energy centers. In 2022, 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 2045, including aggressive interim goals to reduce carbon emissions below 2005 levels by 60% 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. Our net-zero emissions goal is consistent with the objectives of the Paris Agreement and limiting global temperature rise to 1.5°C . Therefore, we consider this a science-based target.

The 2005 base year emissions will be updated to include CO2e for Scope 1 and 2.

% target achieved: 32% [% Difference: 2005 to 3-YR Average (2019-2021) Ameren Corporation CO2 Emissions]

The target is underway.

List the emissions reduction initiatives which contributed most to achieving this target

---

Target reference number

Abs 2

Year target was set

2022

Target coverage

Business division

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Scope 3 category(ies)

Base year

2005

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

Target year

2040

Targeted reduction from base year (%)

85

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

28,229,889

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

74,981

Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

28,304,870

% of target achieved relative to base year [auto-calculated]

Target status in reporting year

Underway

Is this a science-based target?

No, but we are reporting another target that is science-based

Target ambition

Please explain target coverage and identify any exclusions

More than 99% of Ameren’s direct GHG emissions occur as a result of operations of Ameren Missouri's fossil-fueled energy centers. In 2022, 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 2045, including aggressive interim goals to reduce carbon emissions below 2005 levels by 60% 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. Our net-zero emissions goal is consistent with the objectives of the Paris Agreement and limiting global temperature rise to 1.5°C . Therefore, we consider this a science-based target.

The 2005 base year emissions will be updated to include CO2e for Scope 1 and 2.

% target achieved: 32% [% Difference: 2005 to 3-YR Average (2019-2021) Ameren Corporation CO2 Emissions]

The target is underway.

Plan for achieving target, and progress made to the end of the reporting year

More than 99% of Ameren's direct GHG emissions occur as a result of operations of Ameren Missouri's fossil-fueled energy centers. In 2022, 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 2045, including aggressive interim goals to reduce carbon emissions below 2005 levels by 60% 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. Our net-zero emissions goal is consistent with the objectives of the Paris Agreement and limiting global temperature rise to 1.5°C . Therefore, we consider this a science-based target.

The 2005 base year emissions will be updated to include CO2e for Scope 1 and 2.

% target achieved: 32% [% Difference: 2005 to 3-YR Average (2019-2021) Ameren Corporation CO2 Emissions]

The target is underway.

List the emissions reduction initiatives which contributed most to achieving this target

Target reference number

Abs 3

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Scope 3 category(ies)

Base year

2005

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

Target year

2045

Targeted reduction from base year (%)

100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

28,229,889

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

74,981

Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

28,304,870

% of target achieved relative to base year [auto-calculated]

Target status in reporting year

Underway

Is this a science-based target?

No, but we are reporting another target that is science-based

Target ambition

Please explain target coverage and identify any exclusions

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. Our net-zero emissions goal is consistent with the objectives of the Paris Agreement and limiting global temperature rise to 1.5°C . Therefore, we consider this a science-based target.

The 2005 base year emissions will be updated to include CO2e for Scope 1 and 2.

% target achieved: 32% [% Difference: 2005 to 3-YR Average (2019-2021) Ameren Corporation CO2 Emissions]

The target is underway.

Plan for achieving target, and progress made to the end of the reporting year

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. Our net-zero emissions goal is consistent with the objectives of the Paris

Agreement and limiting global temperature rise to 1.5°C . Therefore, we consider this a science-based target.

The 2005 base year emissions will be updated to include CO2e for Scope 1 and 2.

% target achieved: 32% [% Difference: 2005 to 3-YR Average (2019-2021) Ameren Corporation CO2 Emissions]

The target is underway.

List the emissions reduction initiatives which contributed most to achieving this target

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

2021

Target coverage

Business division

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Base year

2021

Consumption or production of selected energy carrier in base year (MWh)

4,668,131

% share of low-carbon or renewable energy in base year

15

Target year

2021

% share of low-carbon or renewable energy in target year

15

% share of low-carbon or renewable energy in reporting year

15

% of target achieved relative to base year [auto-calculated]

Target status in reporting year

Achieved

Is this target part of an emissions target?

The 2021 Missouri Renewable Energy Standard requirement was 4,668,131--- 15% of the total retail electric sales of 31,120,872 MWh for 2021. 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 target coverage and identify any exclusions

The 2021 Missouri Renewable Energy Standard requirement was requirement was 4,668,131---15% of the total retail electric sales of 31,120,872 MWh for 2021. 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.

Plan for achieving target, and progress made to the end of the reporting year

List the actions which contributed most to achieving this target

The 2021 Missouri Renewable Energy Standard requirement was 4,668,131---15% of the total retail electric sales of 31,120,872 MWh for 2021. 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

2021

Target coverage

Business division

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Base year

2021

Consumption or production of selected energy carrier in base year (MWh)

2,201,468

% share of low-carbon or renewable energy in base year

6.3

Target year

2021

% share of low-carbon or renewable energy in target year

10

% share of low-carbon or renewable energy in reporting year

10

% of target achieved relative to base year [auto-calculated]

100

Target status in reporting year

Achieved

Is this target part of an emissions target?

2021 Ameren Illinois RECs: 2,201,468 MWhs (RECs 6.3% of total retail load). Total retail load was 35,104,385 MWh for calendar year 2021 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 target coverage and identify any exclusions

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.

Plan for achieving target, and progress made to the end of the reporting year

List the actions which contributed most to achieving this target

2021 Ameren Illinois RECs: 2,201,468 MWhs (RECs 6.3% of total retail load). Total retail load was 35,104,385 MWh for calendar year 2021 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

0

Target year

2030

Figure or percentage in target year

35

Figure or percentage in reporting year

5

% of target achieved relative to base year [auto-calculated]

14.2857142857

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 target coverage and identify any exclusions

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).

Plan for achieving target, and progress made to the end of the reporting year

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).

List the actions which contributed most to achieving this target

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

Abs3

Target year for achieving net zero

2045

Is this a science-based target?

No, but we are reporting another target that is science-based

Please explain target coverage and identify any exclusions

The net-zero target is a company-wide goal to achieve net-zero carbon emissions by 2045, including interim goals to reduce carbon emissions below 2005 levels by 60% by 2030 and 85% by 2040,
This new company-wide goal includes both Scope 1 and 2 emissions, including other greenhouse gas emissions of methane, nitrous oxide and sulfur hexafluoride, encompasses direct emissions from both Ameren Missouri's and Ameren Illinois' operations, as well as electricity usage at Ameren buildings.

Our net-zero emissions goal is consistent with the objectives of the Paris Agreement and limiting global temperature rise to 1.5°C . Therefore, we consider this a science-based target.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Unsure

Planned milestones and/or near-term investments for neutralization at target year

Planned actions to mitigate emissions beyond your value chain (optional)

More than 99% of Ameren's direct GHG emissions occur as a result of operations of Ameren Missouri's fossil-fueled energy centers. In 2022, 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 2045, including interim goals to reduce carbon emissions below 2005 levels by 60% 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*	5	665,480
Implemented*	0	0
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)

54

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1,339

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

361,200

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 2021, Ameren completed several energy efficiency projects that are expected to reduce energy consumption by approximately 60,000 kWh annually and reduce our CO2 emissions by ~54 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 changing stations at our buildings with more than 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)

618,226

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

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

20,634,800

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

198,000,000

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 376,000 MWh (2021) and avoided approx. 273,275 metric tons, assuming 0.72 metric tons of CO2 per 1 MWh and adjusting for line losses. In 2021, Ameren Illinois saved 448,650 MWh and avoided approximately 325,435 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. 3.28 million therms in 2021 and avoided approximately 17,400 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. 397,000 therms in 2021 and avoided approx. 2,100 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)

47,200

Scope(s) or Scope 3 category(ies) where emissions savings occur

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 2021. 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 2021, 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 2021, Ameren Missouri's non-solar generation requirement was 4,574,768 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, High Prairie and Atchison wind energy centers 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 2021, the solar requirement was 93,363 MWhs and was met with S-RECs generated from Ameren Missouri customer installed solar, community solar projects, solar at Ameren headquarters, 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. Ameren Missouri 2022 Integrated Resource Plan (IRP) Update 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.
Dedicated budget for energy efficiency	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. $198 million on a number of energy efficiency programs in 2021 (electric and natural gas programs). 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. 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 $360 million over the life of the plan. In 2021, Ameren Missouri spent about $78 million on energy efficiency programs. State law requires Ameren Illinois to offer customer energy-efficiency programs, and imposes electric energy-efficiency savings goals and a maximum annual amount of investment in electric energy-efficiency programs. Every four years, Ameren Illinois is required to file a four-year electric energy-efficiency plan with the Illinois Commerce Commission (ICC). In July 2021, the ICC issued an order approving Ameren Illinois' electric and natural gas energy-efficiency plans for 2022 through 2025, as well as regulatory recovery mechanisms. The order authorized electric and natural gas energy-efficiency program expenditures of $425 million and $66 million, respectively, over the four-year period. Subsequent to this order, the Illinois Energy Transition Legislation was enacted, which increased the allowed annual investments in electric energy-efficiency programs from approximately $100 million to approximately $120 million for the 2022 to 2025 period, among other things. In 2021, Ameren Illinois spent about $84 million on energy efficiency programs.
Dedicated budget for low-carbon product R&D	Ameren has invested in research relating to alternative forms for generation. In 2021, Ameren spent over $2.36 Million for CO2

	emissions reduction and alternative energy generation R&D programs. 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.
Employee engagement	Ameren maintains a Sustainability Executive Steering Committee to lead Ameren's enterprise-wide sustainability/ESG responsibility efforts including providing input to our strategy and advocating for a culture of sustainability among co-workers and suppliers. In 2022, Ameren further emphasized the importance of managing ESG and climate-related issues by establishing a chief sustainability and diversity officer (CSDO) who reports to the CEO. The CSDO guides climate-related corporate strategy by working closely with leadership, management teams and subject matter experts, 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. Ameren released its 2022 Ameren Sustainability Report in May 2022. The 2022 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 implemented an environmental policy. Ameren offered plug-in electric vehicle (EV) incentives to co-workers in 2021. 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.
Internal price on carbon	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, or an implicit price that reflects the potential costs of other regulations affecting carbon emitting resources. For its 2022 update to its 2020 IRP preferred plan, Ameren Missouri used a base and high scenario price. Starting in 2025 the base price starts at $1.38 per metric ton and escalates at approximately 43% per year for the first 5 years and then slows to an escalation of 3.5% per year thereafter. Starting in 2025 the high price starts at $3.93 per metric ton and escalates at approximately 43% per year for the first 5 years and then slows to an escalation of 5% 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. 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 renewable generation resources and energy efficiency measures.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Pure Power voluntary REC program for customers

Type of product(s) or service(s)

Other

Other, please specify

Pure Power voluntary REC program for customers

Description of product(s) or service(s)

Ameren Missouri Pure Power voluntary REC program for customers

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

based on emission factors in eGRID

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Not applicable

Functional unit used

Not Applicable

Reference product/service or baseline scenario used

Not Applicable

Life cycle stage(s) covered for the reference product/service or baseline scenario

Not applicable

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

660,327

Explain your calculation of avoided emissions, including any assumptions

Ameren Missouri's voluntary green program called Pure Power sold RECs to customers in 2021. Since the start of the program in 2007, the RECs were retired on behalf of these customers with a potential reduction in over 660,000 metric tons of Scope 1 CO2 assuming 0.72 metric tons of CO2 per 1 MWh and adjusting for line losses.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

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Level of aggregation

Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Ameren Missouri Solar Rebates

Type of product(s) or service(s)

Other

Other, please specify

Ameren Missouri Solar Rebates

Description of product(s) or service(s)

Ameren Missouri Solar Rebates

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

based on emission factors in eGRID

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Not applicable

Functional unit used

Not Applicable

Reference product/service or baseline scenario used

Not Applicable

Life cycle stage(s) covered for the reference product/service or baseline scenario

Not applicable

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

94,197

Explain your calculation of avoided emissions, including any assumptions

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 2021, Ameren Missouri had approximately 100 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 140,000 MWh per year, avoiding over 94,190 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.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

---

Level of aggregation

Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Ameren Missouri Energy Efficiency

Type of product(s) or service(s)

Other

Other, please specify

Ameren Missouri Energy Efficiency

Description of product(s) or service(s)

Ameren Missouri Energy Efficiency

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

based on emission factors in eGRID

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Not applicable

Functional unit used

Not Applicable

Reference product/service or baseline scenario used

Not Applicable

Life cycle stage(s) covered for the reference product/service or baseline scenario

Not applicable

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

273,275

Explain your calculation of avoided emissions, including any assumptions

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 376,740 MWh and avoided approximately 273,275 metric tons of Scope 1 CO2, assuming 0.72 metric tons of CO2 per 1 MWh and adjusting for line losses in 2021.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

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Level of aggregation

Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Ameren Illinois Energy Efficiency

Type of product(s) or service(s)

Other

Other, please specify

Ameren Illinois Energy Efficiency

Description of product(s) or service(s)

Ameren Illinois Energy Efficiency

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

based on emission factors in eGRID

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Not applicable

Functional unit used

Not Applicable

Reference product/service or baseline scenario used

Not Applicable

Life cycle stage(s) covered for the reference product/service or baseline scenario

Not applicable

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

325,435

Explain your calculation of avoided emissions, including any assumptions

Ameren Illinois has an energy efficiency program in 2021 saved 448,650 MWh and avoided approximately 325,435 metric tons of Scope 1 CO2, assuming 0.72 metric tons of CO2 per 1 MWH and adjusting for line losses in 2021.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

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Level of aggregation

Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Ameren Natural Gas Energy Efficiency

Type of product(s) or service(s)

Other

Other, please specify

Ameren Natural Gas Energy Efficiency

Description of product(s) or service(s)

Ameren Natural Gas Energy Efficiency

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

based on emission factors in eGRID

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Not applicable

Functional unit used

Not Applicable

Reference product/service or baseline scenario used

Not Applicable

Life cycle stage(s) covered for the reference product/service or baseline scenario

Not applicable

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

19,516

Explain your calculation of avoided emissions, including any assumptions

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 2021, it saved approximately 3,2791,70 therms and avoided approximately 17,408 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 2021 it saved about 397,000 therms and avoided approximately 2,108 metric tons of Scope 1 CO2.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

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 2022 Ameren Missouri Integrated Resource Plan (IRP) Update 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 60 percent by 2030 and 85 percent by 2040 (based on 2005 levels), with a goal of achieving net-zero by 2045.

(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, all unprotected pipelines will be eliminated. Now, our Ameren Illinois and Ameren Missouri natural gas distribution systems are almost entirely of

plastic and protective coated steel pipelines with no cast iron pipe in our systems (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 over 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) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	Yes, a change in boundary	Scope 1 expanded to include emissions from natural gas consumption in buildings. Scope 2 expanded to include emissions additional Ameren Missouri buildings.

		Scope 3 expanded to include emissions for eight Scope 3 categories: purchased goods and services; capital goods; fuel and energy related activities; upstream transportation and distribution; waste generated in operations; business travel; employee commuting; and use of sold products.

C5.1c

(C5.1c) Have your organization's base year emissions been recalculated as result of the changes or errors reported in C5.1a and C5.1b?

	Base year recalculation	Base year emissions recalculation policy, including significance threshold
Row 1	No, because we do not have the data yet and plan to recalculate next year	We plan to recalculate the base year to the best of our ability pending data availability for 2005 (scope 1 and 2).

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1, 2005

Base year end

December 31, 2005

Base year emissions (metric tons CO2e)

38,419,673

Comment

2005 Scope 1 emissions include: Ameren Generation only. The 2005 data provided excludes information related to the energy centers Ameren divested in late 2013 and early 2014 but includes information related to our Meredosia and Hutsonville Energy Centers, which were closed prior to 2015. The 2005 base year emissions will be updated to include CO2e for the Scope 1 reporting boundary.

Scope 2 (location-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 1: Purchased goods and services

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 6: Business travel

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Mandatory Greenhouse Gas Reporting Rule
US EPA Emissions & Generation Resource Integrated Database (eGRID)
Other, please specify
USEPA Clean Air Act Acid Rain Program

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)

28,229,889

Comment

2021 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

74,981

Scope 2, market-based (if applicable)

74,981

Comment

Our Scope 2 emissions are the same for location-based and market-based. Scope 2 includes electricity usage at Ameren Illinois Buildings and Ameren Missouri Buildings excluding Callaway (nuclear electricity generation facility) and Taum Sauk (pump storage electricity generation facility).

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

Electricity consumption at Ameren Missouri owned office buildings at certain generation buildings (i.e., Callaway Energy Center and Taum Sauk)

Relevance of Scope 1 emissions from this source

No emissions from this source

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

Scope 2 includes electricity usage at Ameren Illinois Buildings and Ameren Missouri Buildings excluding Callaway (nuclear electricity generation facility) and Taum Sauk (pump storage electricity generation facility).

Estimated percentage of total Scope 1+2 emissions this excluded source represents

1

Explain how you estimated the percentage of emissions this excluded source represents

Likely less than 1% of total scope 1 and 2 emissions when compared to other emissions sources.

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

Emissions in reporting year (metric tons CO2e)

1,575,053

Emissions calculation methodology

Spend-based method
Fuel-based method

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

0

Please explain

Extraction and production of natural gas sold to customers
Fuel-based method.
Inputs: Quantity (MMBtu) of natural gas purchased for sale to customers, as reported for USEPA Subpart NN.
Emission Factors: natural gas-specific upstream factors from "2021 GHG Conversion Factors for Company Reporting" published by the UK Government
Other goods and services (non-fuel) purchased in 2021
Spend-based method.
Inputs: Ameren 2021 expenditure summaries, categorized for application of Scope 3 GHG emission factors.
Emission Factors: Commodity type-specific emission factors from USEPA's Supply Chain GHG Emission Factors for US Commodities and Industries v1.1.
GWPs as used in USEPA: 40 CFR 98, Table A-1; derived from Intergovernmental Panel

on Climate Change AR4 (2007)

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

905,098

Emissions calculation methodology

Spend-based method

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

0

Please explain

Inputs: Ameren 2021 expenditure summaries (non-fuel), categorized for application of Scope 3 GHG emission factors.
Emission Factors: Commodity type-specific emission factors from USEPA's Supply Chain GHG Emission Factors for US Commodities and Industries v1.1.

GWPs as used in USEPA: 40 CFR 98, Table A-1; derived from Intergovernmental Panel on Climate Change AR4 (2007)

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

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

8,478,655

Emissions calculation methodology

Fuel-based method

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

100

Please explain

Inputs: 2021 totals of each energy types (fuels and electricity) used by Ameren.
Emission Factors: Fossil fuel upstream emission factors from "2021 GHG Conversion Factors for Company Reporting" published by the UK Government. Nuclear and renewable upstream emission factors from National Renewable Energy Laboratory. Coal emission factor from National Energy Technology Laboratory (Methods and Data to Account for Upstream Emissions from Coal and Natural Gas."

T&D losses: Midwest region-specific grid loss factor from USEPA eGRID 2020 applied to kWh of electricity used by Ameren, to determine kWh of T&D loss. Applied the electricity upstream emission factor from the source above, along with the SERC Midwest eGRID subregion combustion emission factor.

Includes generation of electricity that Ameren purchases and sells to customers.

GWPs as used in USEPA: 40 CFR 98, Table A-1; derived from Intergovernmental Panel on Climate Change AR4 (2007)

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

788,307

Emissions calculation methodology

Spend-based method
Distance-based method

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

0

Please explain

Transportation of coal used for electricity generation
Distance-based method
Inputs: Tonnage and miles of coal transported
Emission Factor: USEPA's 2021 GHG Emission Factors Hub, Table 8 "Scope 3 Category 4: Upstream Transportation and Distribution, and Category 9: Downstream Transportation and Distribution"

Transportation of other purchased goods and services
Spend-based method
Inputs: Transportation expenditure total obtained from Ameren 2021 expenditure summary spreadsheets.
Emission Factor: USEPA's Supply Chain GHG Emission Factors for US Commodities and Industries v1.1. Used the "Truck transportation" emission factor as a high estimate, as the associated GHG emissions are higher than for other transportation modes per $ spent.

GWPs as used in USEPA: 40 CFR 98, Table A-1; derived from Intergovernmental Panel on Climate Change AR4 (2007)

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

66,048

Emissions calculation methodology

Average data method

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

0

Please explain

Inputs: Amounts of landfilled and recycled waste, obtained from Ameren sources including a waste shipment database.
Emission Factors: USEPA's 2021 GHG Emission Factors Hub, Table 9 "Scope 3 Category 5: Waste Generated in Operations and Category 12: End-of-Life Treatment of Sold Products"

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

4,127

Emissions calculation methodology

Spend-based method
Distance-based method

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

14

Please explain

Vehicle Travel
Distance-based method
Inputs: Total vehicle mileage for 2021. Personal vehicles for business use; mileage obtained from Ameren employee expense reports. Rental Vehicles; mileage obtained from vehicle rental company Enterprise.
Emission Factor: USEPA's 2021 GHG Emission Factors Hub, Table 10 "Scope 3 Category 6: Business Travel and Category 7: Employee Commuting"

Air Travel
Spend-based method
Inputs: 2021 expenditures obtained from Ameren employee expense reports, as mileage is not tracked.

Emission Factor: Air transportation emission factor from USEPA's Supply Chain GHG Emission Factors for US Commodities and Industries v1.1

GWPs as used in USEPA: 40 CFR 98, Table A-1; derived from Intergovernmental Panel on Climate Change AR4 (2007)

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

7,191

Emissions calculation methodology

Distance-based method

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

0

Please explain

Inputs: Ameren employee numbers. Calculations assume all Ameren employees commuting every working day of the year, for an average round trip distance of 10 miles.
Emission Factor: USEPA's 2021 GHG Emission Factors Hub, Table 10 "Scope 3 Category 6: Business Travel and Category 7: Employee Commuting"

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Ameren reports under Operational Control; therefore energy consumption from leased vehicles or facilities should be included under Scopes 1 and 2.
leased vehicles or facilities should be included under Scopes 1 and 2.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Ameren's product is delivered by wire or pipeline. The associated GHG emissions from these methods are captured in Ameren's Scope 1 inventory.

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, their products are not processed, they are simply consumed.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

7,003,489

Emissions calculation methodology

Fuel-based method

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

0

Please explain

Inputs: Quantity (MMBtu) of natural gas sold to customers, as reported for USEPA Subpart NN
Emission Factor: Natural gas combustion factor from USEPA's 2021 GHG Emission Factors Hub, Table 1 "Stationary Fuel Combustion" used to calculate total carbon dioxide equivalent in accordance with the GHG Protocol. This calculated value differs slightly from the report Subpart NN value because it includes methane and nitrous oxide emissions.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Ameren's products, electricity and natural gas, are consumed and have no end of life issues.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Ameren does not lease out any assets to other entities

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Ameren is required to deliver energy in its franchised service territory. This delivery is only to ultimate customers, and therefore inclusion in the Franchises category would be double-counting.

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

Not evaluated

Please explain

Other (downstream)

Evaluation status

Not evaluated

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.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment

Row 1	51,768	2021 emissions from the Maryland Heights Renewable Energy Center (MHREC). 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.

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

0.0044

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

28,304,870

Metric denominator

unit total revenue

Metric denominator: Unit total

6,394,000,000

Scope 2 figure used

Location-based

% change from previous year

1.4

Direction of change

Decreased

Reason for change

Electricity production increased and revenues were higher in 2021 compared to 2020. Our 2021 CO2e emissions were higher compared to 2020. The result was a decrease intensity for 2021.

Intensity figure

0.71

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

28,304,870

Metric denominator

megawatt hour generated (MWh)

Metric denominator: Unit total

39,822,634.26

Scope 2 figure used

Location-based

% change from previous year

7.23

Direction of change

Increased

Reason for change

Electricity production from fossil resources increased in 2021 compared to 2020. Our 2021 CO2e emissions were higher compared 2020. This resulted in an increase in the intensity for 2021.

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	27,903,790	Other, please specify Table A-1 in 40 CFR Part 98, Subpart A
CH4	170,159	Other, please specify

		Table A-1 in 40 CFR Part 98, Subpart A
N2O	138,263	Other, please specify Table A-1 in 40 CFR Part 98, Subpart A
SF6	17,677	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	0.775	17,677	
Combustion (Electric utilities)	27,857,477	3,186	0	28,075,311.5	
Combustion (Gas utilities)	1,121	3,617	0	91,549.8	
Combustion (Other)	45,192	2	0	45,351.2	
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	28,229,889

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	28,058,366
Distribution	171,524

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

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

	Gross Scope 1 emissions, metric tons CO2e	Comment
Electric utility activities	28,229,889	2021: 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 CO2e)	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	54	Increased	164	Energy efficiency in buildings 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 2021, Ameren completed several energy efficiency projects that are expected to reduce energy consumption by approximately 60,000 kWh annually and reduce our CO2 emissions by ~54 metric tons annually (assuming 0.72 metric tons of CO2 per 1 MWh and adjusting for line losses). This was an increase of 164% compared to 2020: ((54-20)/20) = ~164%
Divestment				
Acquisitions				
Mergers				
Change in output	2,262,636	Increased	8.7	Scope 1 Emissions from generation activities. Electricity production in 2021 was higher than 2020. A total increase of 2,262,636.12 tons CO2e compared to 2020; therefore, we calculated an increase of 8.7% as follows: (2,262,636.12 / 25,967,253)*100 = 8.7%.
Change in methodology				
Change in boundary	16,874.97	Increased	29	Scope 2 Emissions expanded boundary to include Ameren Missouri electric consumption form buildings. A total increase of 16,874.97 tons CO2e compared to 2020; therefore, we calculated an increase of 29% as follows: (16,874.97/58,106)*100 = 29%.
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 30% but less than or equal to 35%

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)	3,402,871	36,194,831.03	39,597,702.26
Consumption of purchased or acquired electricity		224,932	0	224,932
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		3,627,803	36,194,831.03	39,822,634

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.

Sustainable biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

87,035.77

MWh fuel consumed for self-generation of electricity

15,485.66

MWh fuel consumed for self-generation of heat

0

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Coal

Heating value

HHV

Total fuel MWh consumed by the organization

30,987,073.28

MWh fuel consumed for self-generation of electricity

1,788,238.39

MWh fuel consumed for self-generation of heat

0

Comment

Oil

Heating value
LHV

Total fuel MWh consumed by the organization
12,702

MWh fuel consumed for self-generation of electricity
1,447.69

MWh fuel consumed for self-generation of heat
0

Comment

Gas

Heating value
LHV

Total fuel MWh consumed by the organization
441,497.51

MWh fuel consumed for self-generation of electricity
42,973.93

MWh fuel consumed for self-generation of heat
0

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

Comment

Total fuel

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

31,528,308.56

MWh fuel consumed for self-generation of electricity

1,848,145.68

MWh fuel consumed for self-generation of heat

0

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)

30,987.07

Net electricity generation (GWh)

29,198.83

Absolute scope 1 emissions (metric tons CO2e)

27,704,456

Scope 1 emissions intensity (metric tons CO2e per GWh)

894.06

Comment

The 2021 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)

12.7

Net electricity generation (GWh)

11.25

Absolute scope 1 emissions (metric tons CO2e)

14,912

Scope 1 emissions intensity (metric tons CO2e per GWh)

1,174.02

Comment

The 2021 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)

441.49

Net electricity generation (GWh)

398.52

Absolute scope 1 emissions (metric tons CO2e)

277,079

Scope 1 emissions intensity (metric tons CO2e per GWh)

627.59

Comment

The 2021 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.

Sustainable 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.

Other 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)

87.04

Net electricity generation (GWh)

71.55

Absolute scope 1 emissions (metric tons CO2e)

52,033

Scope 1 emissions intensity (metric tons CO2e per GWh)

597.83

Comment

The 2021 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)

4,514.6

Net electricity generation (GWh)

4,187.2

Absolute scope 1 emissions (metric tons CO2e)

9,885.24

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

2021 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)

1,798.63

Net electricity generation (GWh)

1,784.98

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The 2021 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)

1,732.84

Net electricity generation (GWh)

1,723.91

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The 2021 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)

9.29

Net electricity generation (GWh)

9.29

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The 2021 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)

238.96

Net electricity generation (GWh)

86.09

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The 2021 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)

39,822.63

Net electricity generation (GWh)

37,299.45

Absolute scope 1 emissions (metric tons CO2e)

28,058,366

Scope 1 emissions intensity (metric tons CO2e per GWh)

704.58

Comment

The 2021 reported values are based on Ameren's generation.
Emissions intensity based on gross generation.

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area

United States of America

Consumption of electricity (MWh)

38,078

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

38,078

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 1

Emissions from energy losses (metric tons CO2e)

0

Length of network (km)

5,069

Number of connections

1,220,000

Area covered (km2)

52,576

Comment

Ameren Missouri transmission data reported. Emissions included in Scope 1. 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 1

Emissions from energy losses (metric tons CO2e)
0

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 1

Emissions from energy losses (metric tons CO2e)

0

Length of network (km)

54,914

Number of connections

1,220,000

Area covered (km2)

52,576

Comment

Ameren Missouri distribution data reported. Emissions included in Scope 1. 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 1

Emissions from energy losses (metric tons CO2e)

0

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 organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

Coal – hard

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Lignite

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Oil

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Gas

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Sustainable biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Other biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Waste (non-biomass)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Nuclear

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Geothermal

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Hydropower

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Wind

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Solar

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Marine

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Fossil-fuel plants fitted with CCS

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Other renewable (e.g. renewable hydrogen)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

Other non-renewable (e.g. non-renewable hydrogen)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Explain your CAPEX calculations, including any assumptions

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

Smart 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. We will continue to provide our customers and communities with benefits and value. Our $8.4 billion plan for 2022 to 2026 will further our efforts to create a stronger, smarter, cleaner, more resilient and secure electric grid. As one component of SEP, Ameren Missouri expects to invest approximately $462 million in smart grid operations. This involves deploying smart and automated switching devices and building a private fiber wireless communication network to enable the system to more rapidly detect and isolate outages, reroute power and restore service. These devices have improved reliability up to 40%. Smart Grid also includes investments in the LED streetlight program . Ameren Missouri, in collaboration with communities, upgrades streetlights to energy-efficient LED bulbs.	462,000,000	5.5	2026
Other, please specify Ameren Missouri Smart Meter Program	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. We will continue to provide our customers and communities with benefits and value. Our $8.4 billion plan for 2022 to 2026 will further our efforts to create a stronger, smarter, cleaner, more resilient and secure electric grid.	188,000,000	2	2026

	One component of the SEP is installing over 1 million** smart meters by 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. ** Does not include gas modules. All installations by 2024.			

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	Ameren has invested in research relating to alternative forms of generation. In 2021, Ameren spent over $2.36 Million for CO2 emissions reduction and alternative energy generation R&D programs. 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 these 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.

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 CO2 emissions reduction and alternative energy generation R&D programs	Applied research and development	21-40%	2,360,000	Ameren has invested in research relating to alternative forms of generation. In 2021, Ameren spent over $2.36 Million for CO2 emissions reduction and alternative energy generation R&D programs. 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. 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 these 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. We are unable to calculate the savings from these investments.

C10. Verification

C10.1

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

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

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 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 2022 CDP GHG Scope 1 and 2.pdf

Page/ section reference

See attachment for 2021 Scope 1 emissions

Relevant standard

ISAE3000

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 2022 CDP GHG Scope 1 and 2.pdf

Page/ section reference

See attachment for 2021 Scope 2 emissions

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1c

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

Scope 3 category

Scope 3: Purchased goods and services
Scope 3: Capital goods
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Waste generated in operations
Scope 3: Business travel
Scope 3: Employee commuting
Scope 3: Use of sold products

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 2022 CDP Scope 3_26July_FINAL (revised).pdf

Page/section reference

See attachment for 2021 Scope 3 emissions

Relevant standard

ISAE3000

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
Drive low-carbon investment
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)

2.66

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, or an implicit price that reflects the potential costs of other regulations affecting carbon emitting resources. For its 2022 update to its 2020 IRP preferred plan, Ameren Missouri used a base and high scenario price. Starting in 2025 the base price starts at $1.38 per metric ton and escalates at

approximately 43% per year for the first 5 years and then slows to an escalation of 3.5% per year thereafter. Starting in 2025 the high price starts at $3.93 per metric ton and escalates at approximately 43% per year for the first 5 years and then slows to an escalation of 5% 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. 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 renewable generation resources and energy efficiency measures.

Type of internal carbon price

Implicit price

Other, please specify

Explicit Price

Impact & implication

The inclusion 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.

Using a carbon price for long-term resource planning allows Ameren Missouri's management to evaluate and mitigate potential risks regarding the continued operation of fossil-fueled resources and the potential mitigation benefits of adding renewable energy resources, energy efficiency measures or other carbon-free resources. By explicitly considering these potential risks, mitigation measures, and benefits, Ameren Missouri is able to fully consider potential portfolio options and the pace of its transition to a cleaner generation portfolio.

Ameren Missouri explicitly analyzes the impact of different potential levels of carbon price when assessing potential decisions regarding unit retirements or retrofits, additions of renewable generation resources including wind and solar generation, and consideration of other resources needed to ensure power system reliability.

C12. Engagement

C12.1

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

Yes, our suppliers

Yes, our customers/clients

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)

55

% 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 2021, Ameren asked 84 suppliers to complete the assessment (representing 55% 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.

In addition, Ameren held two supply chain sustainability workshops in 2021 with suppliers to introduce the supply chain sustainability team to suppliers and expectations to partner to advance supply chain sustainability.

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 2021 survey results.

Comment

Ameren engages our suppliers through our involvement with the EUISSCA. In 2021, EUISSCA sent a voluntary survey to its members top 84 suppliers to assess their commitment to sustainability (metrics include: reductions in GHG emissions, waste and

water usage). This represents approximately 55% of Ameren's total 2021 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 & Details of engagement

Education/information sharing

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 in largely embedded in Ameren Missouri's 2022 Integrated Resource Plan Update (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 2022 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 60 percent by 2030 and 85 percent by 2040 (based on 2005 levels), with a goal of achieving net-zero CO2 emission by 2045.

More information is available at 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 2045. 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 2021.

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.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

No, but we plan to introduce climate-related requirements within the next two years

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers
Yes, we engage indirectly through trade associations
Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

No, and we do not plan to have one in the next two years

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

Ameren's board of directors oversees environmental policy matters and strategies, including those related to planning for the potential implications of climate-related issues. Ameren's board also oversees the Company's public affairs activities, including regular review of political contributions and related expenditures. Ameren's government affairs teams are responsible for processes and commitments that ensure coordination with and consistent adherence to Ameren's strategic objectives, including with respect to climate-related matters, and to implement corrective actions when inconsistencies are found. Representatives of Ameren's government affairs teams participate in Ameren's Sustainability Executive Steering Committee, which is led by the Chief Sustainability and Diversity Officer, and which oversees the Company's environmental, social and governance initiatives.

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

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Focus of policy, law, or regulation that may impact the climate

Adaptation and/or resilience to climate change

Specify the policy, law, or regulation on which your organization is engaging with policy makers

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.

Policy, law, or regulation geographic coverage

Regional

Country/region the policy, law, or regulation applies to

United States of America

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

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.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

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.

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.

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

No, we have not evaluated

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Edison Electric Institute (EII)

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

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.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

224,784.61

Describe the aim of your organization's funding

Ameren serves on several committees and in leadership positions in EEI. Ameren tracks the activities of EEI and we provide input. The funding figure represents the financial disclosure of Ameren lobbying portion of 2021 EEI dues/payments

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

American Gas Association

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

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.

Yes, we have evaluated whether our organization's engagement with AGA and there seems to be general alignment.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

16,320.47

Describe the aim of your organization's funding

Ameren serves on several committees and in leadership positions in AGA. Ameren tracks the activities of AGA and we provide input. The funding figure represents the financial disclosure of Ameren lobbying portion of 2021 AGA dues/payments.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Nuclear Energy Institute

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

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.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

34,775

Describe the aim of your organization's funding

Ameren serves on several committees and in leadership positions in NEI. Ameren tracks the activities of NEI and we provide input. The funding figure represents the financial disclosure of Ameren lobbying portion of 2021 NEI dues/payments.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

National Association of Manufacturers (NAM)

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"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."

Yes, we have evaluated whether our organization's engagement with NAM and there seems to be general alignment.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

10,000

Describe the aim of your organization's funding

Ameren is actively engaged. Ameren tracks the activities of NAM and we provide input. The funding figure represents the financial disclosure of Ameren lobbying portion of 2021 NAM dues/payments.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Alliance for Transportation Electrification

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

"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."

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

7,500

Describe the aim of your organization's funding

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. The funding figure represents the financial disclosure of Ameren lobbying portion of 2021 Alliance for Transportation Electrification dues/payments.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization

Research organization

State the organization to which you provided funding

Electric Power Research Institute (EPRI).

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

2,360,400

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

Ameren has invested in research relating to alternative forms of generation. In 2021, Ameren spent over $2.3 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.

EPRI and GTI Low-Carbon Resources Initiative. Ameren is investing in EPRI's Low-Carbon Research Initiative to evaluate various low-carbon generation technologies and energy carriers to support clean energy decarbonization efforts. This collaboration focuses on the need to accelerate the development of low-carbon technologies necessary beyond 2030 to aid utilities in meeting the net-zero by 2045 target.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

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

2021 Ameren Annual-Report.pdf

Page/Section reference

2021 Annual Report (pg 2-7)
2021 Form 10-K (pg 24, 71)

Content elements

Governance
Strategy
Risks & opportunities
Emission targets

Comment

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

Publication

In voluntary communications

Status

Complete

Attach the document

2022_Ameren_Sustainability_Report.pdf

Page/Section reference

2022 Ameren Sustainability Report, Transforming for Our Future. Entire Report.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

2022 Sustainability Report: Ameren's latest sustainability report covers Ameren's progress in 2021, including establishing a net-zero carbon emissions goal and substantial investments in clean energy.

Also, the report includes Ameren's business activities mapped to the United Nations Sustainable Development Goals, which address the global challenges society faces. This 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 other regulatory filings

Status
Complete

Attach the document
Ameren Missouri 2022-Preferred-Plan-Update.pdf

Page/Section reference
2022 Change in Preferred Plan Ameren Missouri Integrated Resource Plan Update

More information is available at AmerenMissouri.com/IRP.

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

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 communications

Status
Complete

Attach the document
2021_Ameren_Climate_Report_TCFD.pdf

Page/Section reference

Ameren Corporation Climate Report - Committed to Clean: Transformational Changes Toward Net-Zero. Entire Report.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

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 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 voluntary communications

Status

Complete

Attach the document

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

Page/Section reference

Ameren ESG Investor Presentation: Leading the Way to a Sustainable Energy Future (May 2022). 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.

Publication

In voluntary communications

Status

Complete

Attach the document

2022_Ameren_EEI_AGA_SustainTemplate.pdf

Page/Section reference

EEI AGA ESG Sustainability Template. 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.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, executive management-level responsibility	Ameren Biodiversity Policy Biodiversity is the variety and number of living plants, animals, and aquatic species present in the natural environment, upon which we rely for health, commerce, and quality of life. As part of our corporate social responsibility, we recognize the importance of conserving natural habitat and native species to aid in protecting biodiversity in the regions we serve. Our policy is to reduce, minimize, or avoid impacts on biodiversity as we develop infrastructure or conduct operations. We will consider biodiversity and mitigation measures or enhancements to the ecosystems of the lands and waterways we manage. We will do the following to meet the commitments under this policy: • Assess and prevent or reduce detrimental effects on biodiversity from company actions and ongoing operations, wherever possible. • Promote, support and participate in wildlife protection initiatives and programs that are responsive to and consistent with our business activities. • Continue to implement habitat mitigation measures or enhancements associated with projects as we improve and modernize our electric and natural gas businesses. • Continue to establish habitat reserves on Ameren-owned properties where feasible. • Utilize native plantings in landscaping or vegetation restoration endeavors where practical. • Create awareness and understanding of biodiversity by engaging with coworkers and stakeholders including the communities and customers we serve, government agencies, universities and other organizations when planning, building and operating our energy infrastructure. • Utilize pollinator-supportive and native plants as part of construction, maintenance, and restoration activities where practical

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed

Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Other, please specify Ameren Biodiversity Policy	Other, please specify We carefully considered the biodiversity challenges across our service territory and reflect our value of Stewardship as it relates to the priority challenges of birds, bats, pollinators, and large river health and ecology.

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?
Row 1	No, but we plan to assess biodiversity-related impacts within the next two years

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water management Education & awareness

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	Other, please specify ● Ameren maps the areas where we planted native pollinator friendly plants in our rights-of-way.

C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located

In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	2022 Ameren Sustainability Report, Transforming for Our Future. Biodiversity highlights on page 21. 1

[1]2022_Ameren_Sustainability_Report.pdf

C16. 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.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Vice President, Chief Sustainability and Diversity Officer	Chief Sustainability Officer (CSO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms

Independent Assurance Statement to Ameren

ERM Certification and Verification Services Inc ('ERM CVS') was engaged by Ameren Services Company Inc ('Ameren') to provide limited assurance in relation to specified 2021 (year ending December 31st 2021) GHG data presented in its CDP Climate Change 2022 Questionnaire (the 'Report') as set out below.

Engagement summary	
Scope of our assurance engagement	Whether the 2021 data for the specified indicators listed below are fairly presented in accordance with the reporting criteria: • Total Scope 1 GHG emissions (absolute) [metrics tons CO2e] • Total Scope 2 GHG emissions (absolute) (location-based) [metric tons CO_2e] – Sources include Ameren Illinois buildings and Ameren Missouri buildings but exclude Callaway (nuclear electricity generation facility) and Taum Sauk (pump storage electricity generation facility)
Reporting criteria	US EPA Mandatory GHG Reporting Rule and Ameren's internal reporting criteria and definitions (where relevant).
Assurance standard	International Standard on Assurance Engagements ISAE 3000 (Revised).
Assurance level	Limited assurance.
Respective responsibilities	Ameren is responsible for preparing the data and for its correct presentation to third parties, including disclosure of the reporting criteria and boundary. ERM CVS' responsibility is to provide a conclusion on the agreed scope based on the assurance activities performed and exercising our professional judgement.

Our conclusion

Based on our activities, nothing has come to our attention to indicate that the 2021 data for the selected GHG data as reported in section C6.1 and C6.3 of Ameren's CDP Climate Change 2022 Questionnaire and shown below are not fairly presented, in all material respects, with the reporting criteria.

- **Total Scope 1 GHG emissions:** 28,229,889 metric tons CO2e
- **Total Scope 2 GHG emissions (location-based):** 74,981 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 sample of data against the continuous emissions monitoring system (CEMS) data and other source data where relevant;
- 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 GHG emissions:** 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; and
- **Scope 2 GHG emissions:** Ameren Illinois buildings and Ameren Missouri buildings excluding Callaway (nuclear electricity generation facility) and Taum Sauk (pump storage electricity generation facility).

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.

Independence

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.

ERMCVS
Informed Assured

Gareth Manning
Partner, ESG & Sustainability Assurance

25 July 2022

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

Independent Assurance Statement to Ameren

ERM Certification and Verification Services Inc ('ERM CVS') was engaged by Ameren Services Company Inc ('Ameren') to provide limited assurance in relation to specified 2021 (year ending December 31st 2021) GHG data in its CDP Climate Change 2022 Questionnaire (the Questionnaire) as set out below.

Engagement summary	
Scope of our assurance engagement	Whether the 2021 data for the specified indicators listed below are fairly presented in accordance with the reporting criteria: • Total Scope 3 GHG emissions (absolute) [$MTCO_2e$] consisting of the following categories: – Category 1 – Purchased goods and services – Category 2 – Capital goods – Category 3 – Fuel- and energy-related activities – Category 4 – Upstream transportation and distribution – Category 5 – Waste generated in operations – Category 6 – Business travel – Category 7 – Employee commuting – Category 11 – Use of sold products
Reporting criteria	WBCSD/WRI GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2004, as updated January 2015); Ameren's internal reporting criteria and definitions (where relevant).
Assurance standard	International Standard on Assurance Engagements ISAE 3000 (Revised).
Assurance level	Limited assurance.
Respective responsibilities	Ameren is responsible for preparing the data and for its correct presentation to third parties, including disclosure of the reporting criteria and boundary. ERM CVS' responsibility is to provide conclusions on the agreed scope based on the assurance activities performed and exercising our professional judgement.

Our conclusions

Based on our activities, nothing has come to our attention to indicate that the 2021 data for the selected GHG data as shown below and reported in sections C6.5 and C10.1 of Ameren's CDP Climate Change 2022 Questionnaire are not fairly presented, in all material respects, with the reporting criteria.

Total Scope 3 GHG emissions (consisting of the categories 1, 2, 3, 4, 5, 6, 7, and 11): 18,827,969 $MTCO_2e$

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 sample of data against the source evidence;
- 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;
- A review of the results of Ameren's internal QA/QC procedures on the GHG emissions; and
- A review of the presentation of information relevant to the scope of our work in the Questionnaire to ensure consistency with our findings.

The limitations of our engagement

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 team.

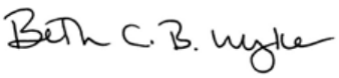
Independence

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 in any respect.

Our observations

Without affecting the conclusions presented above, we have the following key observation:

- Ameren should increase the level of visibility in its' procurement system and consider using more granular categorizations of spend data in the future.



Beth Wyke
Partner, Head of Corporate Assurance
Malvern PA

26 July 2022
ERM Certification and Verification Services, Inc.
email: post@ermcvs.com