Welcome to your CDP Climate Change Questionnaire 2023

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 across 64,000 square miles in Illinois and Missouri. In 2022, Ameren had total annual operating revenues of more than $7.9 billion.

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.
Ameren’s net generating capacity, substantially all of which is owned by AMO, was approximately 10,000 MW as of 12/31/22. In 2022, AMO’s energy supply was approximately 62% from coal, 22% from nuclear, 3% from hydro, 5% from wind, <1% from methane gas and solar, <1% from purchased wind, 1% from natural gas and 7% from purchased power.

Ameren’s 2022 year end rate base consisted of approximately 77% from electric and natural gas transmission and distribution investments, 9% coal generation, 7% renewable generation ,6% nuclear generation, and 1% natural gas 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 and shareholders. This increasing value of the grid is expected to be driven by the need for a smarter, more resilient energy delivery system to incorporate increasing distributed and renewable generation sources. Ameren expects the percentage of its rate base represented by coal-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 Integrated Resource Plan (IRP), as updated in June 2022, which outlines plans to retire more than 3,500

MW of fossil-fired generation by 2030. The coal-fired Meramec Energy Center was retired at the end of 2022. The IRP also includes the addition of 2,800 MW of new, clean, renewable generation by 2030 and a total of 4,700 MW by 2040. The IRP also includes the addition of 800 MW of battery storage by 2040. To maintain reliability and resiliency for customers, IRP also includes the addition of a 1,200 MW combined-cycle energy center by 2031. Ameren has a goal of achieving net-zero GHG emissions by 2045, including 60% reduction by 2030, and an 85% reduction by 2040, as compared to 2005 levels. This goal includes both Scope 1 and 2 GHG emissions and encompasses direct emissions from operations, as well as electricity usage at Ameren buildings. More information is available at Ameren.com/IRP. Ameren Missouri will file a new IRP in September 2023.

For additional information, including access to Ameren's voluntary sustainability reporting, please visit AmerenInvestors.com.

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. In addition to factors discussed in this report, Ameren's Annual Report on Form 10-K for the year ended December 31, 2022, and its other reports filed with the Securities and Exchange Commission under the Securities Exchange Act of 1934 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. All "forward-looking" statements included in this report are based upon information presently available, and, 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 and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

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 or committee	Responsibilities for climate-related issues
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 goas were discussed with the Board of Directors.(Result) Details of the company goal are available publicly at amerenmissouri.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 annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement	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.

	Reviewing and guiding the risk management process	The Finance Committee oversees and reviews major capital projects, including projects related to environmental (climate) compliance and the execution of our climate transition plans. 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.

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The CEO is the highest position responsible for climate-related issues at Ameren. We have several other officers who are responsible for climate-related issues, including (i) Senior VP–Strategy, Innovation, Environmental Services & Risk , who reports to the Senior Executive VP & Chief Financial Officer (CFO); (ii) Senior VP–Finance & Chief Accounting Officer, who reports to the Senior Executive VP & CFO; (iii) Executive VP-General Counsel & Secretary, who reports to the CEO (iv) Senior VP and Chief Sustainability, Diversity and Philanthropy Officer (CSDPO), who report to the CEO and (v) operating subsidiary Presidents, who report to the CEO. Our CFO also reports directly to our CEO. Our strategy and actions are subject to stringent governance requirements.

Varied management teams in our organization plan and execute our risk strategy, as well as coordinate with internal/external subject matter experts to inform the Board and company leadership of specific issues. These teams include: environmental, innovation, legislative and reg. affairs, corp. 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 corp. planning teams report to the SVP of Strategy, Innovation, and Sustainability & Risk or CSDPO). Our Board of Directors also has extensive oversight over our strategy, execution and all key risks, including key climate risks.

In Nov. 2022, Ameren published a climate report titled "Committed to Clean: Transformational Changes Toward Net-Zero." The report is based on recommendations from TCFD. 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 future. It details how that plan is consistent with meeting the 1.5°C goal, the target established by the Paris Agreement. It 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 EPRI's study regarding utility industry scenario analyses with respect to climate change. It was prepared by a cross-functional group of subject matter experts from across the Company, including representatives from our communications, corp. planning, corp. social responsibility, environmental, finance, legal, electric and gas operations, and strategy and innovation departments and outside advisors. Members of Ameren's Exec. 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.

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

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Profit share

Performance indicator(s)

Achievement of climate transition plan KPI
Progress towards a climate-related target
Achievement of a climate-related target
Implementation of an emissions reduction initiative

Incentive plan(s) this incentive is linked to

Long-Term Incentive Plan

Further details of incentive(s)

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. The LTP is evaluated during a 3-year performance period.

10% of the LTIP is tied to Performance Share Units (PSUs) based on clean energy transition goals/results (renewable generation and energy storage additions, as well as coal-fired energy center retirements)

The PSUs long-term incentive awards tied to Clean Energy Transition that were granted in 2020 (and paid in March 2023) were earned at 95 percent of target based on placing 708.2 MW of renewable generation and energy storage in service over the three-year measurement period (2020-2022). This performance, which was slightly below the target level of 738 MW, reflected our significant investments in two wind energy centers in Missouri.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

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---targeting net-zero by 2045.

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. 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.

Ameren’s ERM process is a robust system whose primary objective is to assist management in identifying, evaluating, and mitigating risks in a timely fashion. It plays a critical role in the sustained, successful execution of Ameren's long-term strategy and achieving its goals to deliver superior long-term value to customers and shareholders. Ameren’s ERM COSO framework’s purpose is to assess how big the risk impacts potentially are in order to focus

attention on the most important threats and to lay the groundwork for risk response. Risk level assessments are performed within the business on a consistent schedule and are based on a combination of both quantitative and qualitative metrics. The quantitative metrics include financial impacts: Capital expenditures, O&M costs, Earnings per Share, and Customer Affordability. Qualitative impacts include Reputation and Brand, Regulatory and Legal, People, and Safety and Security. Ameren's Board of Directors delegates the risk monitoring function to the ARC. The ARC relies on the RMSC, comprised of the CFO and Senior Executives, to oversee risk management across the Corporation.

Ameren's ERM system defines substantive risk based on the significant qualitative and quantitative risk assessment impact level. Ameren's ERM COSO framework considers probability and impact, both on a 1-5 scale. The overall risk level is determined based on the probability and the highest impact resulting in a risk score of low (1-9), medium (10-18), or high (19-25). ERM defines substantive when quantitative impacts reach a significant level when a risk occurs at CapEx or O&M reaching greater than or equal to $50M, Earnings Impact (one-time) at greater than $200M, and/or Customer Affordability CAGR of greater than 0.75%. Qualitative impacts reach substantive at a significant impact level when a risk occurs and, for example, enterprise level assets are damaged, an event reaches national news coverage, there is reputational damage to Ameren, and/or the workforce becomes disengaged and higher levels of turnover are occurring.

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 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

Upstream
Downstream

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.

Ameren's Enterprise Risk Management (ERM) process is a robust system whose primary objective is to assist management in identifying, evaluating, and mitigating risks in a timely fashion. It plays a critical role in the sustained, successful execution of Ameren's long-term strategy and achieving its goals to deliver superior long-term value to customers and shareholders. Ameren's ERM COSO framework's purpose is to assess how big the risk impacts potentially are in order to focus attention on the most important threats and to lay the groundwork for risk response. Risk level assessments are performed within the business on a consistent schedule and are based on a combination of both quantitative and qualitative metrics. The quantitative metrics include financial impacts: Capital expenditures, O&M costs, Earnings per Share, and Customer Affordability. Qualitative impacts include Reputation and Brand, Regulatory and Legal, People, and Safety and Security.

Ameren's ERM system defines substantive risk based on the significant qualitative and quantitative risk assessment impact level. Ameren's ERM COSO framework considers probability and impact, both on a 1-5 scale. The overall risk level is determined based on the probability and the highest impact resulting in a risk score of low (1-9), medium (10-18), or high (19-25). ERM defines substantive when quantitative impacts reach a significant level when a risk occurs at CapEx or O&M reaching greater than or equal to $50M, Earnings Impact (one-time) at greater than $200M, and/or Customer Affordability CAGR of greater than 0.75%. Qualitative impacts reach substantive at a significant impact level when a risk occurs and, for example, enterprise level assets are damaged, an event reaches national news coverage, there is reputational damage to Ameren, and/or the workforce becomes disengaged and higher levels of turnover are occurring.

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 to lead 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.

Transition Case Study
Situation: 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).Task: The IRP is designed to ensure that customers' long-term energy needs are met in a reliable, cost-effective and environmentally responsible manner. Action: 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. Result: The IRP, 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.

Physical Case Study
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 November 2022 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 Enterprise Risk Management program. All relevant environmental laws and regulations are incorporated into our climate-related risk assessments, and associated business risk is evaluated in the annual risk profile process. One risk to our business is potential increased costs associated with compliance with new unit specific regulatory standards for GHG emissions. In May 2023, the EPA issued a proposed rule that would set strict emission limits on fossil-fuel-fired power plants that would eventually require the adoption of carbon capture technology or add clean hydrogen fuel to reduce emissions. The impacted fossil-fuel-fired power plants would be required to comply with the rule through a phased-in approach or retire. Capacity restrictions for coal-fired units could apply as early as 2030, unless a unit commits to co-firing or retiring. Larger natural gas-fired power plants would be required to co-fire with clean hydrogen by 2032, with additional requirements by 2038. A final rule is expected in 2024, and legal challenges are likely as the proposed rules compliance technologies are not commercially available. Ameren

		Missouri is currently reviewing the proposed rule and cannot predict the impact of any such regulations on the results of operations, financial position, and liquidity of Ameren or Ameren Missouri. The ultimate impacts of any environmental regulation to the Ameren system will depend on federal agency actions, state implementation plan requirements, if applicable, general market conditions, and the outcome of any associated legal challenges. These factors are regularly reassessed as new information arises.
Emerging regulation	Relevant, always included	Ameren considers emerging regulation in risk assessment by analyzing the potential impacts of proposed regulations or legislation in the annual risk profile process. Climate related initiatives remain a focus area of Congress and Federal Agencies, and Ameren relies upon internal and external subject matter experts to understand the risks legislative or regulatory changes may pose to company operations. Emerging regulation from new legislation or Administration policy designed to further limit emissions from fossil fuels is a risk for Ameren. There has been significant activity in Congress on climate-related legislation over the last several years that include a range of policies to achieve reduction in GHG emissions. Proposed regulatory and legislative policies have the potential to increase costs and/or regulatory constraints on the energy sector. Ameren engages with stakeholders and policymakers to promote constructive policy that balances the principles of safe, reliable and affordable energy. In our planning process, we consider a range of scenarios related to climate policy to support current and future major investment decisions and account for the risks regulatory changes may pose.
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 is 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. Changes in 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. Timely access to reasonable terms 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 all of our stakeholders on our compliance strategies, including through community meetings and events, robust reports, shareholder engagement and regulatory filings. Ameren takes advantage of multiple opportunities to engage its key stakeholders. One example is the engagement with stakeholders as part of Ameren Missouri's IRP process, which resulted in the establishment of both a net-zero carbon emissions goal and a plan for the transformational addition of new wind and solar generation. Other engagements that create opportunities for information sharing includes the annual Community Voices Workshops, which allows for two-way dialogue between Ameren and community leaders. 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 for 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 fulfillment of requirements imposed by regulators. One focus is on vegetation management in conjunction with requirements set forth by our regulators. Ameren also receives real-time weather prediction information from independent providers. To enhance weather preparedness, Ameren Missouri partners with Saint Louis University on a unique weather forecasting system called Quantum Weather. A network of monitoring stations provides neighborhood-by-neighborhood predictions of potential severe weather – hours in advance of its arrival. 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, commonly known as "system hardening," to avoid potential impacts and damages that may otherwise occur. 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 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. Changes in weather patterns, that impact temperatures and precipitation, could affect customer load patterns which may increase or decrease electric and natural gas usage. The warming of the climate may increase electricity sales and reduce natural gas sales for heating load. This could result in increases or decreases in revenues for Ameren, depending on the level of warming. It could reduce the production from hydroelectric, wind, and solar renewable resources. It could also impact reliability and increase customer cost. Changes in natural resources may include low water levels in rivers; warmer water in rivers due to lower flows and higher ambient temperatures, reduced

		water quality due to low flows and higher ambient temperatures, increased flooding events along rivers; and longer growing seasons with increased vegetation. Ameren's capital expenditure plan for the next five years (2023-2027), issued and effective as of February 16, 2023 includes Ameren plans to invest $3.8 billion in transmission system improvements to ensure that we will be able to provide reliable, safe service now and in the future. We have enterprise risk management (ERM) and governance programs to identify, evaluate and manage risks. Our ERM program is a comprehensive, consistently applied management framework that captures all climate-related policy and legal, physical, reputational and financial risks.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Technology

Transitioning to lower emissions technology

Primary potential financial impact

Increased capital expenditures

Company-specific description

Ameren Missouri's (AMO) 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, reflects 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 Scope 1 and 2 greenhouse gas 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, as updated 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 renewable generation by 2040.
The total addition of 4,700 MWs of renewables by 2040 represents an investment opportunity of ~$7.5 billion.

Our ability to complete construction projects, including those contemplated by the IRP, successfully within projected estimates and to acquire renewable generation facilities 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 2020 IRP, as updated in June 2022, 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.

More information is available at Ameren.com/IRP.

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, reflects 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 Scope 1 and 2 greenhouse gas emissions of 60% by 2030 and 85% by 2040, compared to 2005 levels, with a goal of achieving 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 figure represents the aggregate investment opportunity associated with the addition of 4,700 MW of new, renewable generation by 2040, as set forth in Ameren Missouri's 2020 IRP, as updated in June 2022.

Cost to realize opportunity

7,500,000,000

Strategy to realize opportunity and explanation of cost calculation

The potential financial impact figure represents the aggregate investment opportunity associated with the addition of 4,700 MW of new, renewable generation by 2040, as set forth in Ameren Missouri's 2020 IRP, as updated in June 2022.

Comment

Ameren's strategy for addressing climate risk is largely embedded in Ameren Missouri's 2020 IRP, as updated in June 2022.
Ameren is targeting reductions in Scope 1 and 2 greenhouse gas 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.

The current IRP reflects Ameren Missouri's plan to add 2,800 MW of renewable generation by 2030 and 4,700 MW by 2040, in addition to 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, Ameren Missouri plans to add a 1,200 MW combined-cycle energy center by 2031. All coal-fired energy centers are expected to be retired by 2042. Ameren Missouri also expects to seek an extension of its operating license for the carbon-free Callaway Nuclear Energy Center beyond 2044.

More information is available at AmerenMissouri.com/IRP.

C3. Business Strategy

C3.1

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

Row 1

Climate transition plan

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

Publicly available climate transition plan

Yes

Mechanism by which feedback is collected from shareholders on your climate 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 2022 and early 2023, 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; EVP General Counsel and Secretary; SVP Chief Sustainability, Diversity & Philanthropy Officer; Senior Director, Environmental Strategy and Analysis, Director, Investor Relations, Director, Corporate Sustainability and Director, Corporate Analysis. 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 climate transition plan (optional)

- Sustainability-Report Part 4.pdf
- Sustainability-Report Part 3.pdf
- Sustainability-Report Part 1.pdf
- Sustainability-Report Part 2.pdf
- 2022 IRP-Update.pdf
- ameren-sustainability-investor-deck-may-2023-vfinal_may-update.pdf
- Ameren Climate-Report-TCFD.pdf
- Ameren Climate-Report-TCFD.pdf

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 Bespoke transition scenario	Company-wide	1.5ºC	Ameren's strategy for addressing climate risk is embedded in Ameren Missouri's 2022 Integrated Resource Plan (IRP) Update. To 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. It was updated in April 2020 with the release 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.” This report offered a scientifically-based framework for considering uncertainty in climate-scenario analysis and provided insights that could be applied at the company level. It also included other scenario data from sources reviewed by the IPCC, and 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 5th 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 1 of 3 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 timeframe, along with a range of probabilities of staying below 1.5°C. To provide proper context for a review of Ameren Missouri’s most recent IRP, we calculated Ameren’s pro-rata share of emissions for the global electric sector scenarios from the EPRI analysis using Ameren’s share of 2005 emissions. This allowed us to compare the emission reductions associated with our plan to the emissions pathways represented in the scenario analysis data used by EPRI. Comparing the IRP against those scenarios with 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 net-zero emissions by 2045 plan, with interim emissions 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	1.5ºC	Global climate change can impact temperatures, precipitation, streamflow & drought across the US, including in the Midwest & Great Plains regions. The effects of climate change will vary depending on location, and the implications of these effects will be different for various parts of the Ameren organization & supply chain. The Ameren Water Resilience Report assesses the current & 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 & how changes in temperature & precipitation change may influence water resources and water availability. A study area was defined for this report to include the Upper Mississippi Water Resources Region & 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 to assess historical climate observations & projected climate trends for all three of these focus regions. Significant climate change factors, including temperature, precipitation, extreme weather events, drought & streamflow 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. In 2022, Ameren became a foundational member of EPRI's new Climate READi initiative, which has a goal to develop a broadly accepted common framework to facilitate analysis and application of appropriate climate data among all stakeholders to enhance the planning, design and operation of a resilient power system.

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 included in our scenario analysis planning: 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 & 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 & others. The study was updated April 2020 with the release of a new report "Review of 1.5°C & Other Newer Global Emissions Scenarios: Insights for Company & Financial Climate Low-Carbon Transition Risk Assessment & Greenhouse Gas Goal Setting." The EPRI study offered a scientifically-based framework for considering uncertainty in climate-scenario analysis & provided insights that could be applied at the company level. The EPRI study also included other scenario data from sources reviewed by the IPCC, & some scenario data from sources not reviewed by the IPCC, such as the NRDC & Bloomberg New Energy Finance.

Our strategy for addressing climate risk, which is embedded in Ameren Missouri's IRP (updated 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 & reliability, & 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. Our updated plan & scenario analysis informed the acceleration of coal retirements—targeting retirement of 3,000 MW by 2030 & the retirement of all coal energy centers by 2042 (retirement of a total of 5.400 MW) . The Meramec Energy Center (coal-fired) was retired in Dec. 2022. Also, the plan adds 4,700 MW of renewables by 2040 (investment opp. $7.5 B); adds 1,200 MW of combined cycle generation by 2031 (investment opp. of $1.7 B)-planned transition to H2 or H2 blend with carbon capture retrofit by 2040; & adds 800 MW of battery storage by 2040 (investment opp. of $650 M). Our plan is the best way to meet our customer's peak demand & energy consumption over the next 20 years.

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 CO2 emissions levels over a given timeframe, included 100s of emissions pathways published by the IPCC, the UN 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°C. We believe our plan transitions our generation fleet to a cleaner & 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 renewable generation and 800 MW of battery storage 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 operations and weather. 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 $3.394 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. Over 150 jobs have been created along with

		an additional $20 million in follow-on funding for these companies. Ameren also participates in 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. Ameren is also a member of the Low Carbon Resources Initiative, an effort to accelerate the deployment of low- and zero-carbon energy technologies required for technologies to achieve deep decarbonization in a responsible fashion. In addition, Ameren joined EPRI's Climate READi effort. The goal of the Climate Power Resilience and Adaptation Initiative (READi) is to develop a common framework for addressing the entirety of the power system (planning through operations); to provide an informed approach to climate risk assessment and strategic resilience planning that can be replicated; and to drive stakeholder alignment on adaptation strategies for efficient and effective investment.
Operations	Yes	Ameren develops action plans that mitigate risk, manage long-term customer costs and improve shareholder value. As of December 31, 2022, Ameren Missouri's coal-fired energy centers represented approximately 9% of Ameren's rate base. By year end of 2027, Ameren's rate base will include approximately 82% from electric and natural gas transmission and distribution investments with coal generation declining to 3%. 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 renewable generation as well as 800 MW of battery storage 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 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 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). The IRP supports 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 100% of cast and wrought iron pipeline on the natural gas delivery system. 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 $19.7 billion (Ameren Missouri – up to $10.4 billion; Ameren Illinois – up to $5.5 billion; ATXI – up to $3.8 billion) of capital expenditures from 2023 through 2027. 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 by 2031 and 800 MW of battery storage by 2040, representing investment opportunities of $1.7 billion and $650 million, respectively.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition
Row 1	Yes, we identify alignment with our climate transition plan

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

Other, please specify

Percentage, in megawatts, of generation additions based on total expected generation additions from 2022 to 2042.

Type of alignment being reported for this financial metric

Alignment with our climate transition plan

Taxonomy under which information is being reported

Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

0

Percentage share of selected financial metric aligned in the reporting year (%)

0

Percentage share of selected financial metric planned to align in 2025 (%)

9

Percentage share of selected financial metric planned to align in 2030 (%)

33

Describe the methodology used to identify spending/revenue that is aligned

The foregoing percentages represent the number of megawatts (MW) of additional generation (wind, solar, combined cycle, and additional unspecified clean dispatchable resources), as well as battery storage, that are expected to be added to our generation portfolio during the applicable time period as a percentage the total number of MW additions expected between 2022 and 2042, based on Ameren Missouri's 2020 Integrated Resource Plan, as updated in June 2022.

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

Is this a science-based target?

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

Target ambition

1.5°C aligned

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)

38,419,673

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

0

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

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

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

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

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

38,419,673

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, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total 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

100

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]

15,367,869.2

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

24,930,415

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

81,222

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

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

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

Total 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)

25,011,637

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

58.1648018365

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

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 and encompass direct emissions from operations, as well as electricity usage at Ameren buildings. The company also has strong interim goals including a 60% emissions reduction by 2030, and an 85% reduction by 2040, as compared to 2005 levels.

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

Ameren's strategy for addressing climate risk is largely embedded in AMO's 2020 Integrated Resource Plan (IRP), updated in June 2022, which outlines plans to retire more than 3,500 megawatts (MW) of fossil-fired generation by 2030. The Meramec Energy Center (coal-fired generation) was retired at the end of 2022. We also 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. 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.

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

---

Target reference number

Abs 2

Is this a science-based target?

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

Target ambition

1.5°C aligned

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)

38,419,673

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

0

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

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

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

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

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

38,419,673

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, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total 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

100

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]

5,762,950.95

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

24,930,415

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

81,222

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

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

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

Total 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)

25,011,637

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

41.0575071787

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

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 and encompass direct emissions from operations, as well as electricity usage at Ameren buildings. The company also has strong interim goals including a 60% emissions reduction by 2030, and an 85% reduction by 2040, as compared to 2005 levels.

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

Ameren's strategy for addressing climate risk is largely embedded in AMO's 2020 Integrated Resource Plan (IRP), updated in June 2022, which outlines plans to retire more than 3,500 megawatts (MW) of fossil-fired generation by 2030. The Meramec Energy Center (coal-fired generation) was retired at the end of 2022. We also 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. 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.

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

---

Target reference number

Abs 3

Is this a science-based target?

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

Target ambition

1.5°C aligned

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)

38,419,673

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

0

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

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

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

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

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

38,419,673

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, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total 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

100

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]

0

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

24,930,415

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

81,222

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

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

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

Total 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)

25,011,637

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

34.8988811019

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

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 and encompass direct emissions from operations, as well as electricity usage at Ameren buildings. The company also has strong interim goals including a 60% emissions reduction by 2030, and an 85% reduction by 2040, as compared to 2005 levels.

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

Ameren's strategy for addressing climate risk is largely embedded in AMO's 2020 Integrated Resource Plan (IRP), updated in June 2022, which outlines plans to retire more than 3,500 megawatts (MW) of fossil-fired generation by 2030. The Meramec Energy Center (coal-fired generation) was retired at the end of 2022. We also 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. 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.

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

2022

Target coverage

Business division

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Base year

2022

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

4,779,936

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

15

Target year

2022

% 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 2022 Missouri Renewable Energy Standard requirement was 4,779,936--- 15% of the total retail electric sales of 31,866,242 MWh for 2022. 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 2022 Missouri Renewable Energy Standard requirement was 4,779,936---15% of the total retail electric sales of 31,886,242 MWh for 2022. 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 2022 Missouri Renewable Energy Standard requirement was 4,779,936---15% of the total retail electric sales of 31,886,242 MWh for 2022. 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

2022

Target coverage

Business division

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Base year

2022

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

2,295,917

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

6.5

Target year

2022

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

10

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

6.5

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

0

Target status in reporting year

Achieved

Is this target part of an emissions target?

2022 Ameren Illinois RECs: 2,295,917 MWhs (RECs 6.5% of total retail load). Total retail load was 35,232,876 MWh for calendar year 2022 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

2022 Ameren Illinois RECs: 2,295,917 MWhs (RECs = 6.5% of total retail load). Total retail load was 35,232,876 MWh for calendar year 2022 and this 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

2022 Ameren Illinois RECs: 2,295,917 MWhs (RECs = 6.5% of total retail load). Total retail load was 35,232,876 MWh for calendar year 2022 and this includes all retail customers, regardless of whether they took the supply component of the utility bill from Ameren Illinois or an alternative supplier.

C4.2b

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

Target reference number

Oth 1

Year target was set

2020

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

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

Low-carbon vehicles

Percentage of low-carbon vehicles in company fleet

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

35

Target year

2030

Figure or percentage in target year

35

Figure or percentage in reporting year

5

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

Target status in reporting year

Underway

Is this target part of an emissions target?

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

Is this target part of an overarching initiative?

Other, please specify

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

Please explain 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?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

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.

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 $19.7 billion (Ameren Missouri – up to $10.4 billion; Ameren Illinois – up to $5.5 billion; ATXI – up to $3.8 billion) of capital expenditures from 2023 through 2027. 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 by 2031 and 800 MW of battery storage by 2040, representing investment opportunities of $1.7 billion and $650 million, respectively.

C4.3

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

Yes

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0

To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	5	579,978
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)

6,006

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)

2,053,625

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

38,769,485

Payback period

16-20 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 2022, Ameren completed several energy efficiency projects that are expected to reduce energy consumption by approximately 82,145 kWh annually and reduce our CO2 emissions by ~6,000 metric tons annually (assuming 0.70 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 a total of 205 ports.

Initiative category & Initiative type

Energy efficiency in production processes

Other, please specify

Ameren Energy Efficiency Programs

Estimated annual CO2e savings (metric tonnes CO2e)

485,372

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)

15,312,200

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

190,900,000

Payback period

11-15 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 155,000 MWh (2022) and avoided approx. 117,200 metric tons, assuming 0.70 metric tons of CO2 per 1 MWh and adjusting for line losses. In 2022, Ameren Illinois saved 457,000 MWh and avoided approximately 345,800 metric tons, assuming 0.70 metric tons of CO2 per 1 MWh and adjusting for line losses. Energy efficiency programs are offered to our natural gas customers in Illinois and Missouri. Ameren Illinois' program saved approx. 4.097 million therms in 2022 and avoided approximately 21,7000 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. 97,000 therms in 2022 and avoided approx. 500 metric tons of customer CO2, assuming 11.7 pounds of CO2 per 1 therm. While these programs are voluntary there are earnings opportunities.

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)

88,600

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 2022. 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 2022, 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 2022, Ameren Missouri's non-solar generation requirement was 4,779,936 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 2022, the solar requirement was 95,599 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 2020 Integrated Resource Plan (IRP), as updated in June 2022 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. $190 million on a number of energy efficiency programs in 2022 (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's energy efficiency plan for 2019-2022 under the Missouri Energy Efficiency Investment Act. The plan included 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 $350 million over the life of the plan. In 2022, Ameren Missouri spent about $71 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, which is approximately $120 million annually through 2029 and may increase by up to approximately $30 million from 2026 to 2029 depending on the election of certain customers to participate in the programs. Every four years, Ameren Illinois is required to file a four-year electric energy-efficiency plan with the ICC. In June 2022, 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 $476 million and $66 million, respectively, over the four-year period. In 2022, Ameren Illinois spent about $119 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 2022, Ameren spent over $3.394 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 participating in 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. Ameren is also a member of the Low Carbon Resources Initiative, an effort to accelerate the deployment of low- and zero-carbon energy technologies required for technologies to achieve deep decarbonization in a responsible fashion. In addition, Ameren joined EPRI's Climate READi effort. The goal of the Climate Power Resilience and Adaptation Initiative (READi) is to develop a common framework for addressing the entirety of the power system (planning through operations); to provide an informed approach to climate risk assessment and strategic resilience planning that can be replicated; and to drive stakeholder alignment on adaptation strategies for efficient and effective investment.
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 sustainability and climate-related issues by establishing a chief sustainability, diversity & Philanthropy officer (CSDPO) who reports to the CEO. The CSDPO 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 2023 Ameren Sustainability Report in May 2022. The 2023 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 2022. 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 low and high scenario price. Starting in 2025 the low 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)

Use stage

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

Use stage

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

729,000

Explain your calculation of avoided emissions, including any assumptions

Ameren Missouri's voluntary green program called Pure Power sold RECs to customers in 2022. Since the start of the program in 2007, the RECs were retired on behalf of these customers with a potential reduction in over 729,000 metric tons of Scope 1 CO2 assuming 0.70 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

0

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

Use stage

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

113,000

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 2022, Ameren Missouri had approximately 118 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 162,000 MWh per year, avoiding over 113,000 metric tons of Scope 1 CO2, assuming 0.70 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

0

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

Use stage

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

117,000

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 155,00 MWh and avoided approximately 117,000 metric tons of Scope 1 CO2, assuming 0.70 metric tons of CO2 per 1 MWh and adjusting for line losses in 2022.

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 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)

Use stage

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

Use stage

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

345,000

Explain your calculation of avoided emissions, including any assumptions

Ameren Illinois has an energy efficiency program in 2022 saved 457,000 MWh and avoided approximately 345,000 metric tons of Scope 1 CO2, assuming 0.70 metric tons of CO2 per 1 MWH and adjusting for line losses in 2022.

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 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)

Use stage

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

Use stage

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

22,200

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 2022. In 2022, it saved approximately 4,097,000 therms and avoided approximately 21,700 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 2022 it saved about 97,000 therms and avoided approximately 500 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, retired in late 2022) 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) 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 in 2022 which used 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.

Case Study
(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?

No

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 natural gas consumption in Ameren Missouri buildings, as well as an estimate of emissions from small fuel oil-fired engines at various electricity generating facilities. Scope 2 expanded to include additional Ameren Missouri energy facilities; specifically, and the Callaway nuclear facility. Scope 3 expanded to include a more fulsome accounting of categories associated with Ameren's energy provision to customers. Specifically: • Scope 3 Category 3, activity D - Generation of electricity that Ameren purchases and sells to customers; the emissions calculations now include upstream activities, as well as the fuel combustion phase, for the generation of that electricity.

C5.1c

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

	Base year recalculation	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	No, because the impact does not meet our significance threshold	In line with the GHG Protocol, due to developments in data, methods of calculation or changes to the inventory boundary, it may be necessary for Ameren to recalculate the total CO2e emissions for the base year and/or that relating to subsequent years. This recalculation would be to maintain consistency in the reported emissions profile and enable a comparison of like-for-like emissions data over time. While the decision to recalculate GHG emissions relating to either the baseline or subsequent years is made on a case-by-case basis, Ameren has established a reference "significance threshold" of 5 percent (increase or decrease) to aid with the decision-making. Specifically, if recalculation of a data sample indicates that the change(s) will affect the overall total by +/- 5 percent or greater than that previously disclosed, the historical dataset is recalculated. In summary, base year and / or other historical emissions are to be retroactively recalculated to reflect changes in the company that would otherwise compromise the consistency and relevance of the reported GHG emissions information. The following conditions will require such an adjustment if a significant change is identified: • A structural change of Ameren's organizational boundaries • Merger, acquisition, or divestiture • Outsourcing (i.e., production of goods that is moved outside of Ameren's defined reporting boundaries) or insourcing (i.e., opposite of "outsourcing"), where the modified case includes emissions that were not previously accounted for within the inventory in Scopes 1, 2, or 3 • A change in calculation methodologies or emission factors • Additional or new data or methodology are available on sources of emissions for which necessary data was not previously available • A significant error or a number of cumulative errors in Ameren's inventory are discovered Significant is defined as a cumulative change (+/-) of 5	No

		percent or larger in Ameren's total base year emissions on a CO2e basis. Based on the policy outlined above, we would recalculate our base year Scope 1 and 2 emissions to the best of our ability pending data availability if the cumulative changes represent a change of 5% or more to our base year Scope 1 and 2 emissions.	

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

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

74,981

Comment

Scope 2 emissions presented include electricity usage only at Ameren Illinois buildings and Ameren headquarters. Scope 2 emissions are the same for location-based and market-based.

Scope 2 (market-based)

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

74,981

Comment

Scope 2 emissions presented include electricity usage only at Ameren Illinois buildings and Ameren headquarters. Scope 2 emissions are the same for location-based and market-based.

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

1,575,053

Comment

Includes emissions associated with Ameren supply chain purchased goods and services for 2021 are included in this summary. Extraction of natural gas sold to customers for 2021 also included.

Scope 3 category 2: Capital goods

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

905,098

Comment

Includes emissions associated with Ameren supply chain capital goods for 2021 are included in this summary.

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

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

8,478,655

Comment

Includes emissions from extraction and production of fuels consumed by Ameren in 2021 for generation of electricity, extraction and production of fuels used internally by Ameren, extraction and production of fuels for electricity used internally by Ameren, T&D losses associated with Ameren's internal electricity consumption, and generation of electricity that Ameren purchases and sells to customers.

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

788,307

Comment

Includes emissions from transportation of fuels used by Ameren for electricity generation and transportation of goods identified in categories 1 and 2.

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

66,048

Comment

Includes emissions from disposal and treatment of waste generated by Ameren's operations.

Scope 3 category 6: Business travel

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

4,127

Comment

Includes emissions associated with personal vehicles, rental vehicles, and air, rail, or bus travel.

Scope 3 category 7: Employee commuting

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

7,191

Comment

Includes emissions from employees commuting in personal vehicles or other means.

Scope 3 category 8: Upstream leased assets

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

0

Comment

Not applicable

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

0

Comment

Not applicable

Scope 3 category 10: Processing of sold products

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

0

Comment

Not applicable

Scope 3 category 11: Use of sold products

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

7,003,489

Comment

Includes emissions associated with customer use of natural gas sold by Ameren.

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

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

0

Comment

Not applicable

Scope 3 category 13: Downstream leased assets

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

0

Comment

Not applicable

Scope 3 category 14: Franchises

Base year start
January 1, 2021

Base year end
December 31, 2021

Base year emissions (metric tons CO2e)
0

Comment
Not applicable

Scope 3 category 15: Investments

Base year start
January 1, 2021

Base year end
December 31, 2021

Base year emissions (metric tons CO2e)
0

Comment
Not applicable

Scope 3: Other (upstream)

Base year start
January 1, 2021

Base year end
December 31, 2021

Base year emissions (metric tons CO2e)
0

Comment
Not applicable

Scope 3: Other (downstream)

Base year start
January 1, 2021

Base year end
December 31, 2021

Base year emissions (metric tons CO2e)
0

Comment

Not applicable

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)
The Greenhouse Gas Protocol: Scope 2 Guidance
The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard
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)

24,930,415

Comment

2022 Scope 1 emissions sources include: Ameren Missouri Generation, Ameren Missouri & Ameren Illinois Vehicle Fleet; Ameren Missouri equipment fuel oil; propane usage in remote facilities, Ameren Illinois & Missouri Natural Gas consumption for buildings; SF6 releases (fugitive emissions) associated with Ameren Illinois and Ameren Missouri electric distribution; and CH4 releases (fugitive emissions) associated with 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

81,222

Scope 2, market-based (if applicable)

81,222

Comment

Our Scope 2 emissions are the same for location-based and market-based, as we use the regional grid average emission factors for both. Scope 2 includes electricity usage at Ameren Illinois Buildings and Ameren Missouri Buildings including Callaway (nuclear electricity generation facility). The electricity use from the grid at Ameren's electricity generation facilities is excluded because of the potential for double counting with our Scope 1 emissions. Including these facilities would materially increase Scope 2 emissions.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 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, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source of excluded emissions

The electricity use from the grid at Ameren's electricity generation facilities is excluded because of the potential for double counting with our Scope 1 emissions. Including these facilities would materially increase Scope 2 emissions.

Scope(s) or Scope 3 category(ies)

Scope 2 (location-based)

Relevance of Scope 1 emissions from this source

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source

Relevance of Scope 3 emissions from this source

Date of completion of acquisition or merger

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

0

Estimated percentage of total Scope 3 emissions this excluded source represents

Explain why this source is excluded

The electricity use from the grid at Ameren's electricity generation facilities is excluded because of the potential for double counting with our Scope 1 emissions. Including these facilities would materially increase Scope 2 emissions.

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

The electricity use from the grid at Ameren's electricity generation facilities is excluded because the potential for double counting with our Scope 1 emissions. These emissions are included in our Scope 1. Therefore, the estimated percentage of total Scope 1+2 emissions this excluded source represents is 0%.

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)

280,867

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: Quantities (Mscf) of natural gas purchased for sale to customers.
Emission Factors: natural gas-specific upstream factor from “GHG Conversion Factors for Company Reporting” published by the UK Government

Other goods and services (non-fuel) purchased in 2022: Spend-based method.
Inputs: Ameren 2022 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.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,216,235

Emissions calculation methodology

Spend-based method

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

0

Please explain

Inputs: Ameren 2022 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.

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

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

11,475,694

Emissions calculation methodology

Fuel-based method

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

100

Please explain

Inputs: 2022 totals of each energy types (fuels and electricity) used by Ameren.
Emission Factors: Fossil fuel upstream emission factors from “GHG Conversion Factors for Company Reporting” published by the UK Government.

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.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

647,560

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 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 2022 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)

202,208

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 GHG Emission Factors Hub, Table 9 "Scope 3 Category 5: Waste Generated in Operations and Category 12: End-of-Life Treatment of Sold Products"

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

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

6,602

Emissions calculation methodology

Spend-based method
Distance-based method

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

13

Please explain

Vehicle travel: Distance-based method
Inputs: Total vehicle mileage for 2022. Personal vehicles for business use; mileage obtained from Ameren employee expense reports.

Rental Vehicles; mileage obtained from vehicle rental company Enterprise. Emission Factor: USEPA GHG Emission Factors Hub, Table 10 "Scope 3 Category 6: Business Travel and Category 7: Employee Commuting"

Air and ground travel: Spend-based method Inputs: 2022 expenditures obtained from Ameren employee expense reports, as mileage is not tracked.
Emission Factors: travel mode-specific emission factors from USEPA's Supply Chain GHG Emission Factors for US Commodities and Industries v1.1

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

4,317

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 are based on badge entry data for Ameren employees commuting to Ameren facilities for a total of 1,369,136 trips for the year, for an average round trip distance of 10 miles.

Emission Factor: USEPA GHG Emission Factors Hub, Table 10 "Scope 3 Category 6: Business Travel and Category 7: Employee Commuting"

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

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)

7,650,215

Emissions calculation methodology

Fuel-based method

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

0

Please explain

Inputs: Quantities (Mscf) of natural gas sold to customers

Emission Factor: Natural gas combustion factor from USEPA GHG Emission Factors Hub, Table 1 "Stationary Fuel Combustion"

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

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 relevant, explanation provided

Please explain

Not applicable. Ameren reports under Operational Control; therefore energy consumption from leased vehicles or facilities should be included under Scopes 1 and 2

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

Any assets leased to other entities, including customers, and not included in Use of sold products.

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	36,719	The biogenic emissions sources include biomethane usage at the Maryland Heights Renewable Energy Center, as well as the biogenic portion of B20 biodiesel used in some of the Ameren Illinois (AIC) vehicles.

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

0.0031

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

25,011,637

Metric denominator

unit total revenue

Metric denominator: Unit total

7,957,000,000

Scope 2 figure used

Location-based

% change from previous year

28.57

Direction of change

Decreased

Reason(s) for change

Change in output
Change in revenue

Please explain

Electricity production from coal decreased and revenues were higher in 2022 compared to 2021. Our 2022 CO2e emissions were lower compared to 2021. The result was an decrease in intensity for 2022.

Intensity figure

0.6131

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

25,011,637

Metric denominator

megawatt hour transmitted (MWh)

Metric denominator: Unit total

40,793,839.11

Scope 2 figure used

Location-based

% change from previous year

14.73

Direction of change

Decreased

Reason(s) for change

Change in output

Please explain

Electricity production from fossil resources decreased in 2022 compared to 2021. Our 2022 CO2e emissions were lower compared 2021. This resulted in a decrease in the intensity for 2022.

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	24,622,427	Other, please specify Table A-1 in 40 CFR Part 98, Subpart A
CH4	165,478	Other, please specify Table A-1 in 40 CFR Part 98, Subpart A
N2O	121,699	Other, please specify Table A-1 in 40 CFR Part 98, Subpart A 💬1
SF6	20,811	Other, please specify Table A-1 in 40 CFR Part 98, Subpart A

💬1Table 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	2,182	3,810	0.91	118,250	
Combustion (Electric utilities)	2,455,688	2,806	408	24,747,390	
Combustion (Gas utilities)	14,384	0.27	0	14,398	
Combustion (Other)	50,173	3.21	0.46	50,377	
Emissions not elsewhere classified	0	0	0	0	

C7.2

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

Country/area/region	Scope 1 emissions (metric tons CO2e)
United States of America	24,930,415

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	24,747,390
Distribution	183,025

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	24,747,390	2022 Scope 1 Emissions

C7.5

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

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
United States of America	81,222	81,222

C7.6

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

By business division

C7.6a

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

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Ameren Illinois Company	38,065	38,065
Ameren Missouri Company	43,157	43,157

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Yes

C7.7a

(C7.7a) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Subsidiary name

Ameren Missouri (AMO)

Primary activity

Energy services & equipment

Select the unique identifier(s) you are able to provide for this subsidiary

CUSIP number

ISIN code – bond

ISIN code – equity

CUSIP number

906548CW0

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)
24,814,287

Scope 2, location-based emissions (metric tons CO2e)
43,157

Scope 2, market-based emissions (metric tons CO2e)
43,157

Comment
Scope 1: electricity generation, natural gas consumption, propane consumption, fuel oil consumption, vehicle fuel consumption, fugitive emissions of SF6 and CH4

Scope 2: electricity consumption at Ameren headquarters, Taum Sauk, Callaway, and all other AMO facilities

---

Subsidiary name
Ameren Illinois (AIC)

Primary activity
Energy services & equipment

Select the unique identifier(s) you are able to provide for this subsidiary
CUSIP number

ISIN code – bond

ISIN code – equity

CUSIP number
02361DAZ3

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)

116,128

Scope 2, location-based emissions (metric tons CO2e)

38,065

Scope 2, market-based emissions (metric tons CO2e)

38,065

Comment

Scope 1: natural gas consumption, vehicle fuel consumption, fugitive emissions of SF6 and CH4

Scope 2: Electricity usage from Ashmore and all other AMO facilities

C7.9

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

Decreased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	Renewables have no emissions. Ameren continues to transition to low-carbon and renewable generation resources
Other emissions reduction activities	0	No change	0	Not applicable
Divestment	0	No change	0	Not applicable
Acquisitions	0	No change	0	Not applicable
Mergers	0	No change	0	Not applicable
Change in output	3,293,233		11.6	Scope 1 Emissions from generation activities were lower in 2022 compared to 2021. Electricity production in 2022

				was higher than 2021. A total decrease of 3,293,233 tons CO2e compared to 2021; therefore, we calculated a decrease of 11.6% as follows: (3,293,233 /28,304,807)_*100 = 11.6%.
Change in methodology	0	No change	0	Not applicable
Change in boundary	0	No change	0	Not applicable (not material)
Change in physical operating conditions	0	No change	0	Not applicable
Unidentified	0	No change	0	Not applicable
Other	0	No change	0	Not applicable

C7.9b

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

Location-based

C8. Energy

C8.1

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

More than 35% but less than or equal to 40%

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)	3,478,682.12	36,988,003.99	40,466,686.11
Consumption of purchased or acquired electricity		327,153	0	327,153
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		3,805,835	36,988,003.99	40,793,839

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

64,652.68

MWh fuel consumed for self-generation of electricity

11,295.42

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

26,734,190.37

MWh fuel consumed for self-generation of electricity

1,605,668.32

MWh fuel consumed for self-generation of heat

0

Comment

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

6,565.88

MWh fuel consumed for self-generation of electricity

1,130.42

MWh fuel consumed for self-generation of heat

0

Comment

Gas

Heating value

LHV

Total fuel MWh consumed by the organization

587,330.18

MWh fuel consumed for self-generation of electricity

49,146.14

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

LHV

Total fuel MWh consumed by the organization

27,392,739.11

MWh fuel consumed for self-generation of electricity

1,667,240.3

MWh fuel consumed for self-generation of heat

0

Comment

Heating value includes both HHV and LVH

C8.2d

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	40,793,839	2,639,306	3,805,835	36,351

Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

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)

26,734.19

Net electricity generation (GWh)

25,128.52

Absolute scope 1 emissions (metric tons CO2e)

25,128.52

Scope 1 emissions intensity (metric tons CO2e per GWh)

911.88

Comment

The 2022 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)

230

Gross electricity generation (GWh)

6.56

Net electricity generation (GWh)

5.44

Absolute scope 1 emissions (metric tons CO2e)

7,072

Scope 1 emissions intensity (metric tons CO2e per GWh)

1,077.15

Comment

The 2022 reported values are based on units operating on oil at our energy centers. Four units operate on oil.
Emissions intensity based on gross generation.

Gas

Nameplate capacity (MW)

3,418

Gross electricity generation (GWh)

587.33

Net electricity generation (GWh)

538.18

Absolute scope 1 emissions (metric tons CO2e)

361,852

Scope 1 emissions intensity (metric tons CO2e per GWh)

616.1

Comment

The 2022 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, retired late 2022).
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)

64.65

Net electricity generation (GWh)

53.36

Absolute scope 1 emissions (metric tons CO2e)

38,438

Scope 1 emissions intensity (metric tons CO2e per GWh)

594.53

Comment

The 2022 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)

9,275.36

Net electricity generation (GWh)

8,860.77

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

2022 data based on our Callaway Energy Center. Nuclear is a non-carbon emitting energy resource. CO2e 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)

1,452.83

Net electricity generation (GWh)

1,436.41

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The 2022 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)

2,269.9

Net electricity generation (GWh)

2,261.27

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The 2022 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)

15

Gross electricity generation (GWh)

18.44

Net electricity generation (GWh)

18.44

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The 2022 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

The 2022 reported values are based on Ameren Missouri's solar energy centers, Solar is a non-carbon emitting energy resource.

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)

384.56

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

The 2022 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)
11,964

Gross electricity generation (GWh)
40,793.83

Net electricity generation (GWh)
38,154.53

Absolute scope 1 emissions (metric tons CO2e)
24,785,632

Scope 1 emissions intensity (metric tons CO2e per GWh)
607.58

Comment
The 2022 reported values are based on Ameren's generation.
Emissions intensity based on gross generation.

C8.2e

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

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
United States of America

Consumption of purchased electricity (MWh)
327,153

Consumption of self-generated electricity (MWh)
40,466,686.11

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

40,793,839.11

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/area/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)

Length of network (km)

5,030

Number of connections

1,220,000

Area covered (km2)

52,576

Comment

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

Ameren does not separately calculate emissions from energy losses from its transmission system because these are already accounted for in Ameren's total Scope

1 emissions since it generates and transmits the electricity. Additionally, energy losses associated with the electricity purchased to serve our customers are reported under Scope 2 (location-based).

Country/area/region
United States of America

Voltage level
Transmission (high voltage)

Annual load (GWh)
4,904

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)

Length of network (km)
7,590

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 545 miles of transmission lines not reflected in this table.
Ameren does not separately calculate emissions from energy losses from its transmission system because these are already accounted for in Ameren's total Scope 1 emissions since it generates and transmits the electricity.

Country/area/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)

Length of network (km)

54,470

Number of connections

1,220,000

Area covered (km2)

52,576

Comment

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

Ameren does not separately calculate emissions from energy losses from its transmission system because these are already accounted for in Ameren's total Scope 1 emissions since it generates and transmits the electricity. Additionally, energy losses associated with the electricity purchased to serve our customers are reported under Scope 2 (location-based).

Country/area/region

United States of America

Voltage level

Distribution (low voltage)

Annual load (GWh)

35,686

Annual energy losses (% of annual load)

5

Scope where emissions from energy losses are accounted for

Scope 1

Emissions from energy losses (metric tons CO2e)

0

Length of network (km)

73,985

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. Ameren does not separately calculate emissions from energy losses from its transmission system because these are already accounted for in Ameren's total Scope 1 emissions since it generates and transmits the electricity. Additionally, energy losses associated with the electricity purchased to serve our customers are reported under Scope 2 (location-based).

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)

0

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

0

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

0

Explain your CAPEX calculations, including any assumptions

Not applicable

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)

0

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

0

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

0

Explain your CAPEX calculations, including any assumptions

Not applicable

Other biomass

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

0

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

0

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

0

Explain your CAPEX calculations, including any assumptions

Not applicable

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)

0

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

0

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

0

Explain your CAPEX calculations, including any assumptions

Not applicable

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)

0

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

0

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

0

Explain your CAPEX calculations, including any assumptions

Not Applicable

Fossil-fuel plants fitted with CCS

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

0

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

0

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

0

Explain your CAPEX calculations, including any assumptions

Not applicable

Other renewable (e.g. renewable hydrogen)

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

0

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

0

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

0

Explain your CAPEX calculations, including any assumptions

Not applicable

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 $9.9 billion plan for 2023 to 2027 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 $438 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 with associated grid upgrades have improved reliability up to 40%. Smart Grid also includes investments in the LED streetlight program . Ameren Missouri, in collaboration with	438,000,000	4.4	2027

	communities, upgrades streetlights to energy-efficient LED bulbs.			
Other, please specify Ameren Missouri Smart Meter	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 $9.9 billion plan for 2023 to 2027 will further our efforts to create a stronger, smarter, cleaner, more resilient and secure electric grid. 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.	104,000,000	1.1	2027

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 2022, Ameren spent over $3.394 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 (unit currency as selected in C0.4) (optional)	Average % of total R&D investment planned over the next 5 years	Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan
Other, please specify CO2 emissions reduction and alternative energy generation R&D programs.	Applied research and development	28	3,394,000	31	Ameren has invested in research relating to alternative forms of generation. In 2022, Ameren spent over $3.394 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. Ameren is also a member of the Low Carbon Resources Initiative, an effort to accelerate the deployment of low- and zero-carbon energy technologies required for technologies to achieve deep decarbonization in a responsible fashion. In addition, Ameren joined EPRI's Climate READi effort. The goal of the Climate Power Resilience and Adaptation Initiative (READi) is to develop a common framework for addressing the entirety of the power system (planning through operations); to provide an informed approach to climate risk assessment and strategic resilience planning that can be replicated; and to drive stakeholder alignment on adaptation strategies for efficient and effective investment.

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 Report for Ameren CDP Climate Change final 7.25.23.pdf

Page/ section reference

See attachment for 2022 Scope 1 emissions (Pages 1-2)

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 Report for Ameren CDP Climate Change final 7.25.23.pdf

Page/ section reference

See attachment for 2022 Scope 2 emissions (Pages 1-2)

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 Report for Ameren CDP Climate Change final 7.25.23.pdf

Page/section reference

See attachment for 2022 Scope 3 emissions (Pages 1-2)

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 canceled any project-based carbon credits within the reporting year?

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.

Type of internal carbon price

Implicit price

How the price is determined

Social cost of carbon

Objective(s) for implementing this internal carbon price

Drive low-carbon investment
Identify and seize low-carbon opportunities
Navigate GHG regulations
Stakeholder expectations
Stress test investments
Other, please specify
Ameren Missouri Integrated Resource Plan

Scope(s) covered

Scope 1

Pricing approach used – spatial variance

Other, please specify
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

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

For its 2022 update to its 2020 IRP preferred plan, Ameren Missouri used a low and high scenario price. Starting in 2025 the low 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. 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.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

2.66

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

25.11

Business decision-making processes this internal carbon price is applied to

Capital expenditure
Operations

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for some decision-making processes, please specify

Ameren Missouri Integrated Resource Plan

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

The inclusion of a 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 GHG emissions data at least annually from suppliers

Collect other climate related information at least annually from suppliers

% of suppliers by number

2.47

% total procurement spend (direct and indirect)

61

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

0

Rationale for the coverage of your engagement

Ameren asked 100 suppliers to complete the assessment (representing 61 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 three supply chain sustainability workshops in 2022 with suppliers to explain why we ask them to complete a sustainability survey, and what we do with the data. We engaged with them 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 2022 survey results.

Success is measured by the number of suppliers who respond, and the number of suppliers that indicate they are pursuing more sustainable practices. The more suppliers that respond and indicate water-related best practice is seen as more successful.

Success is achieved if 50% or more of suppliers asked to fill out the survey actually do. In 2022 we had 70% of suppliers asked to fill out the survey.

Comment

Ameren engages our suppliers through our involvement with the Sustainable Supply Chain Alliance (SSCA; formerly EUISSCA) . In 2022, SSCA sent a voluntary survey to its members top 100 suppliers to assess their commitment to sustainability (metrics include: reductions in GHG emissions, waste and water usage). This represents approximately 61% of Ameren's total 2022 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.).

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

% of suppliers by number

2.47

% total procurement spend (direct and indirect)

61

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

0

Rationale for the coverage of your engagement

Each year, Ameren asks our top suppliers to complete a voluntary industry-specific sustainability assessment which requests information on GHG and water emissions and targets, as well as waste, power procurement, material usage and sourcing, as well as many other topics.

In 2022, we asked 97 of our top suppliers (representing 61% of annual spend) to complete the assessment. We also held a series of three follow up workshops, to which we invited our top suppliers, to engage with and educate suppliers on why our climate goals are important to us, why we ask them to complete the sustainability survey, and what we do with the data. In these workshops, we are able to interface directly with suppliers, answer their questions, and have conversations showing them how we think about our climate action and sustainability goals. 50% of Ameren's suppliers joined the workshops in 2022 and we plan to continue to hold engagement and education sessions like this in future.

While the assessment and workshops are voluntary, suppliers are incentivized to join these sessions because through them they are better able to learn how we can continue to work together as we undergo our energy transition in the face of ongoing climate change.

We plan to continue asking top suppliers to take the sustainability survey as well as inviting them to engage with us in workshops on these topics in future.

Definitions:
- Top suppliers are selected based on (1) top annual spend, as these suppliers have a large impact (spend) within our supply chain and (2) those having a unique position in our supply chain.

Impact of engagement, including measures of success

The sustainability assessment survey demonstrates to our supply base that sustainability is an initiative that Ameren cares about. We informally recognize our top supplier(s) from the 2022 survey results.

We also invite our suppliers to join the workshops to engage with them and help them understand the importance of our transitions as a result of climate change and how we feel we can be working with them to further those efforts.

Success is measured by the number of suppliers who respond to the survey, and that attend our workshops. The more suppliers that respond and join the workshop, the more successful we are in impacting those areas.

Success is achieved if 50% or more of suppliers asked to fill out the survey actually do submit a response and 50% asked to fill out the assessment actually join the workshop. In 2022, 70% of the suppliers asked to fill out the TSP survey actually submitted a response, and more than 50% joined the workshop. Therefore, we had a successful engagement with our suppliers in 2022.

We plan to continue asking top suppliers to take the sustainability survey as well as inviting them to engage with us in workshops on these topics in future.

Definitions:
- Top suppliers are selected based on (1) top annual spend, as these suppliers have a large impact (spend) within our supply chain and (2) those having a unique position in our supply chain.

Comment

We are a member of the Sustainble Supply Chain Alliance (SSCA; formerly EUISSCA) which is a collective of North American utilities that seek to collaborate with suppliers in order to move the needle on sustainable and climate change initiatives. It is through our collaboration with SSCA that we have supported the development of the sustainability assessment we ask our top suppliers to take, and where we found the collaboration with other utilities to carry our our supplier workshops.

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 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 2022 for both Ameren Missouri and Ameren Illinois. The Community Voices Workshops provided information including energy efficiency and energy assistance programs. The company solicited feedback from community-based groups in each state on the variety of programs offered, how they're working for customers and how they could potentially be changed in the future to be even more effective. Their success, among several others, spurred the establishment of a more concentrated effort, the Community Voices Advisory Board. This diverse group of leaders from nonprofits, community action agencies, academia, social services, and economic development, began meeting in 2022 to share community perspectives on relevant issues to assist us in understanding the priorities and interests of their constituents. All members of the board are part of organizations whose focus is on serving underserved communities in St. Louis.

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

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may 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, but we plan to have one in the next two years

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

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, Diversity & Philanthropy 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 periodically 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?

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

Inflation Reduction Act (IRA)

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

Climate change mitigation

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

Low-carbon, non-renewable energy generation

Policy, law, or regulation geographic coverage

National

Country/area/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 is committed to transitioning to clean and renewable energy as fast as we can while maintaining customer reliability and affordability. We have committed to net carbon zero by 2045, and have a 2030 interim goal of 60% reduction (compared to 2005 levels). Ameren supports the Paris climate accord of 1.5 degrees, and have a formal transition plan published (https://www.ameren.com/missouri/company/environment-and-sustainability/integrated-resource-plan).

Ameren supported the clean energy tax credit portions of the IRA as they support our goals of accelerating the transition and keeping costs lower to customers. As a matter of fact, Ameren Missouri customers would save over $1B through tax credits on new energy resources.

To that end, Ameren engages with policymakers to help shape an energy policy that supports more low- and carbon-free energy resources while ensuring our ability to adequately plan and deploy resources that meet the needs of our customers and communities. This engagement with policymakers allows us to deliver clean, safe, reliable, affordable, and resilient energy to our customers. We believe it is important to our business success and to meeting our business goals, including decarbonization. As part of our efforts, we engage directly and indirectly with lawmakers and regulators on a variety of issues, including climate-related issues.

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

IRA: Our engagement with policymakers allows us to deliver clean, safe, reliable, affordable, and resilient energy to our customers. Any proposed alternative would need to reduce impact to customer costs

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

To ensure continued reliability as existing energy centers are retired, we anticipate that new low- to no-carbon generation resources with the capability to produce electricity when needed (i.e., dispatchable) will be needed in the early 2040s to achieve the last 10%-15% of emissions reductions toward our net-zero goal. These technologies may include advanced nuclear generation, carbon capture and storage, hydrogen-fueled generation, long-duration battery storage, and possibly other technologies. Ameren is actively supporting the development and demonstration of these technologies through collaborations with industry groups such as the Edison Electric Institute and Electric Power Research Institute and is preparing to be able to integrate new technologies when they become commercially available. Provisions of the IRA also provide significant and ongoing support for the development of low- to no-carbon technologies. Ameren expects that efforts like these are likely to support the availability of the technologies needed to enable the achievement of our 2045 net-zero goal.

As Ameren transitions to a cleaner and more diverse generation portfolio, climate policies such as the IRA and the Infrastructure Investment and Jobs Act will aid in this transition and benefit customers long term as these tax benefits flow to customers. Ameren Missouri expects more than $1 billion in net benefits by 2032, saving our Ameren Missouri customers an average of more than 4% per year over that period of time as compared to what they would have paid. These clean energy tax credits will significantly reduce the costs of clean energy while accelerating investments to address climate change. Ameren also expects Production Tax Credits to increase annually as renewable resources come online, resulting in additional customer savings. Other policy benefits include tax credits for new zero-emissions developments, existing nuclear power plants and new renewable additions.

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

Infrastructure Investment & Jobs Act (IIJA)

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

Climate change mitigation

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

Low-carbon, non-renewable energy generation

Policy, law, or regulation geographic coverage

National

Country/area/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 is committed to transitioning to clean and renewable energy as fast as we can while maintaining customer reliability and affordability. We have committed to net carbon zero by 2045, and have a 2030 interim goal of 60% reduction (compared to 2005 levels). Ameren supports the Paris climate accord of 1.5 degrees, and have a formal transition plan published (https://www.ameren.com/missouri/company/environment-and-sustainability/integrated-resource-plan).

In support of these goals, Ameren engages with policymakers to help shape an energy policy that supports more low- and carbon-free energy resources while ensuring our ability to adequately plan and deploy resources that meet the needs of our customers and communities. This engagement with policymakers allows us to deliver clean, safe, reliable, affordable, and resilient energy to our customers. We believe it is important to our business success and to meeting our business goals, including decarbonization. As part of our efforts, we engage directly and indirectly with lawmakers and regulators on a variety of issues, including climate-related issues.

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

IIJA: Our engagement with policymakers allows us to deliver clean, safe, reliable, affordable, and resilient energy to our customers. Any proposed alternative would need to reduce impact to customer costs

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

To ensure continued reliability as existing energy centers are retired, we anticipate that new low- to no-carbon generation resources with the capability to produce electricity when needed (i.e., dispatchable) will be needed in the early 2040s to achieve the last 10%-15% of emissions reductions toward our net-zero goal. These technologies may include advanced nuclear generation, carbon capture and storage, hydrogen-fueled generation, long-duration battery storage, and possibly other technologies. Ameren is actively supporting the development and demonstration of these technologies through collaborations with industry groups such as the Edison Electric Institute and Electric Power Research Institute and is preparing to be able to integrate new technologies when they become commercially available. Provisions of the IRA and IIJA also provide significant and ongoing support for the development of low- to no-carbon technologies. Ameren expects that efforts like these are likely to support the availability of the technologies needed to enable the achievement of our 2045 net-zero goal.

As Ameren transitions to a cleaner and more diverse generation portfolio, climate policies such as the IRA and the IIJA will aid in this transition and benefit customers long term. These tax benefits flow to customers, Ameren Missouri expects more than $1 billion in net benefits by 2032, saving our Ameren Missouri customers an average of more than 4% per year over that period of time as compared to what they would have paid. These clean energy tax credits will significantly reduce the costs of clean energy while accelerating investments to address climate change. Ameren also expects Production Tax Credits to increase annually as renewable resources come online, resulting in additional customer savings. Other policy benefits include tax credits for new zero-emissions developments, existing nuclear power plants and new renewable additions.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or 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 policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

EEI member companies are committed to addressing the challenge of climate change and are leading a clean energy transformation. EEI member companies are committed to getting the energy we provide as clean as we can as fast as we can, without compromising customer affordability and reliability.

"EEI's member companies are continuing to work to reduce carbon emissions in our sector and are committed to helping other sectors—particularly the transportation and industrial sectors—transition to clean, efficient electric energy. This is just the start. With investments in new technologies and the right policies, we can do even more to build a cleaner, stronger economy together."

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

236,169.25

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 portion of Ameren's 2022 EEI dues/payments used for lobbying.

Ameren is committed to net carbon zero by 2045, and supports the goals of Pairs Climate agreement. Our company Point of View guides our advocacy work, and should there be differences between the Company position and any association, Ameren will advocate on our stated company goals and targets.

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

American Gas Association

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

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

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

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

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

(Source: https://www.aga.org/globalassets/aga_climate-change-document_final.pdf

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

22,736.11

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 portion of Ameren's 2022 AGA dues/payments used for lobbying.

Ameren is committed to net carbon zero by 2045, and supports the goals of Pairs Climate agreement. Our company Point of View guides our advocacy work, and should there be differences between the Company position and any association, Ameren will advocate on our stated company goals and targets.

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 (NEI)

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

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

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

(Source: https://www.nei.org/advantages/climate)

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

21,638.88

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 portion of Ameren's 2022 NEI dues/payments used for lobbying.

Ameren is committed to net carbon zero by 2045, and supports the goals of Pairs Climate agreement. Our company Point of View guides our advocacy work, and should there be differences between the Company position and any association, Ameren will advocate on our stated company goals and targets.

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

National Association of Manufacturers

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

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

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

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

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

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

(source: Energy-and-Environment-Policies.pdf (nam.org))

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

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 represents the portion of Ameren's 2022 NAM dues/payments used for lobbying. Ameren was a NAM member in 2022---our membership expired in April 2023 and Ameren did not renew NAM membership.

Ameren is committed to net carbon zero by 2045, and supports the goals of Pairs Climate agreement. Our company Point of View guides our advocacy work, and should there be differences between the Company position and any association, Ameren will advocate on our stated company goals and targets.

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 policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

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

[source: Alliance Mission | Alliance for Transportation Electrification (evtransportationalliance.org)]

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

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 portion of Ameren's 2022 Alliance for Transportation Electrification dues/payments used for lobbying.

Ameren is committed to net carbon zero by 2045 and supports the goals of Pairs Climate agreement. Our company Point of View guides our advocacy work, and should there be differences between the Company position and any association, Ameren will advocate on our stated company goals and targets.

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 or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization or individual

Research organization

State the organization or individual to which you provided funding

Electric Power Research Institute (EPRI).

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

3,394,615

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

relating to alternative forms of generation. In 2022, Ameren spent over $3.394 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 Resources 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 targets.

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

AEE-2022-10-K.pdf

2022-annual-report (1).pdf

Page/Section reference

2022 Annual Report (pg 3-7)
2022 Form 10-K (pg 24, 25, 72)

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

Sustainability-Report Part 4.pdf
Sustainability-Report Part 3.pdf
Sustainability-Report Part 1.pdf
Sustainability-Report Part 2.pdf

Page/Section reference

2023 Ameren Sustainability Report, "Powering a Smart, Sustainable Tomorrow." Entire Report.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

2023 Sustainability Report: Ameren's latest sustainability report covers Ameren's progress in 2022, 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-Integrated-Resource-Plan-2022-Update-FINAL (1).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
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 2022 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-sustainability-investor-deck-may-2023-vfinal_may-update.pdf

Page/Section reference

Ameren Sustainability Investor Presentation: Leading the Way to a Sustainable Energy Future (May 2023). Entire Presentation.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

The Ameren Sustainability 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

Attach the document

EEI-AGA-ESG-Sustainability-Template.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.

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization’s role within each framework, initiative and/or commitment

Row 1	Task Force on Climate-related Financial Disclosures (TCFD) Transition Pathway Initiative Other, please specify EEI/AGA ESG/Sustainability Template Reporting Framework	TCFD Reporting Framework: Committed to Clean: Transformational Changes Toward Net-Zero: Ameren's 2022 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. TPI: Ameren is a listed company in the Transition Pathway Initiative (TPI) online tool. Ameren received the highest rating for Management Quality---Strategic Assessment (Level 4). The management quality is an assessment of the management of greenhouse gas emissions and of risks and opportunities related to the low-carbon transition. For Carbon Performance, Ameren's long-term alignment is 2040-2050 is listed as below 2 degrees based on the TPI online tool. Ameren provided feedback to TPI regarding their carbon performance assessment---our net-zero plan is consistent with meeting the 1.5° Celsius goal, the target established by the Paris Agreement. Other, EEI/AGA ESG/Sustainability Template Reporting Framework: 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 metrics. Ameren piloted and participates in this voluntary industry initiative to better serve customers and investors with more uniform and consistent reporting.

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 Ameren provided contributions to several not-for-profit organizations involved in biodiversity efforts within our service territory.

C15.3

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

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Tools and methods to assess impacts and/or dependencies on biodiversity

BISI – Biodiversity Indicators for Site-based impacts

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Tools are used for desktop review of construction projects impacts to assess endangered species. Strive to select projects with least impactful routes and restore sites to foster biodiversity.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Tools and methods to assess impacts and/or dependencies on biodiversity

Other, please specify

Partnerships to enhance biodiversity

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

In our effort to be good stewards of the thousands of acres of land we maintain, the Ameren Biodiversity Policy guides us in preserving natural habitats, supporting conservation efforts and minimizing our impacts on wildlife. We focus on where we can make the most impact in our service territory – rivers, pollinators, birds and bats – and partner with state departments and conservation groups to determine which projects can be most beneficial for wildlife preservation. Ameren works closely with the U.S. Fish and Wildlife Service and other agencies to avoid or minimize potential impacts, where possible, and mitigate impacts if they are impossible to avoid.

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area

Other biodiversity sensitive area, please specify

Monarch Butterfly Habitat

Country/area

United States of America

Name of the biodiversity-sensitive area

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

The Monarch butterfly primary migratory pathway through the Midwest US overlaps the Ameren service territory. Any construction and vegetation management activities in the Ameren service territory are in the migratory pathway and potentially in Monarch habitat areas.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Project design

Restoration

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Certain vegetation management activities and construction activities that might remove or destroy Monarch butterfly foraging plants or milkweed could negatively impact the Monarch butterfly. In recognition of that, Ameren developed an application to join the Monarch butterfly Candidate Conservation Agreement with Assurances (CCAA) in 2022. [The application was submitted in early 2023, but has not yet been accepted by the University of Illinois, Chicago CCAA management team.] Once Ameren is accepted and has signed on to the CCAA, implementation activities will include documenting Monarch butterfly habitat conservation measures throughout the Ameren service territory. Conservation measures currently include seeding for pollinator-friendly plants after

construction when practicable and using Integrated Vegetation Management strategies such as only spot treating rights-of-way for woody and invasive species on existing transmission rights-of-way where possible.

C15.5

(C15.5) 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

C15.6

(C15.6) 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.

C15.7

(C15.7) 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	https://www.ameren.com/-/media/corporate-site/files/environment/reports/sustainability-report.ashx (2023 Sustainability Report, pg. 17) 1, 2, 3, 4

[1]Sustainability-Report Part 4.pdf

[2]Sustainability-Report Part 3.pdf

[3]Sustainability-Report Part 1.pdf

[4]Sustainability-Report Part 2.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	Senior Vice President, Chief Sustainability, Diversity & Philanthropy 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 Limited Assurance Report to Ameren Corporation

ERM Certification & Verification Services Incorporated ("ERM CVS") was engaged by Ameren Corporation ("Ameren") to provide limited assurance in relation to the selected information set out below and presented in the Ameren 2023 CDP Climate Change Questionnaire.

Engagement summary	
Scope of our assurance engagement	Whether the data for the following selected disclosures listed below are fairly presented in the 2023 CDP Climate Change Questionnaire, in all material respects, in accordance with the reporting criteria. • **Total Scope 1 GHG emissions*** (absolute) [metric tonnes CO_2e] • **Total Scope 2 GHG emissions**** (absolute) (location-based) [metric tonnes CO_2e] • **Total Scope 3 GHG emissions***** [metric tonnes CO_2e] ***Scope 1 emissions include:** Ameren Missouri Generation, Ameren Missouri & Ameren Illinois Vehicle Fleet; Ameren Missouri equipment oil; propane usage; Ameren Illinois & Ameren Missouri Natural Gas consumption for buildings; fugitive emissions from Ameren Illinois and Ameren Missouri electric distribution and Ameren Illinois and Ameren Missouri natural gas supply.* ***Scope 2 emissions include:** Ameren Illinois buildings, Ameren Missouri buildings, and Ameren Headquarters, but exclude electricity generation facilities (see our **Emphasis of Matter**).* ****Scope 3 emissions consist of:** categories 1. Purchased Goods and Services, 2. Capital Goods, 3. Fuel- and Energy-related Activities, 4. Upstream Transportation and Distribution, 5. Waste Generated in Operations, 6. Business Travel, 7. Employee Commuting, and 11. Use of Sold Products.* Our assurance engagement does not extend to information in respect of earlier periods or to any other information included in the CDP Climate Change Questionnaire.
Reporting period	1 January 2022 – 31 December 2022
Reporting criteria	• US EPA Mandatory Greenhouse Gas Reporting Rule; and • WBCSD/WRI GHG Protocol (updated January 2015).
Assurance standard and level of assurance	We performed a limited assurance engagement, in accordance with the International Standard on Assurance Engagements ISAE 3000 (Revised) 'Assurance Engagements other than Audits or Reviews of Historical Financial Information' issued by the International Auditing and Standards Board. The procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement and consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.
Respective responsibilities	Ameren is responsible for preparing the CDP Climate Change Questionnaire and for the collection and presentation of the information within it, and for the designing, implementing, and maintaining of internal controls relevant to the preparation and presentation of the Selected Information. ERM CVS' responsibility is to provide conclusions to Ameren on the agreed scope based on our engagement terms with Ameren, the assurance activities performed and exercising our professional judgement. We accept no responsibility, and deny any liability, to any party other than Ameren for the conclusions we have reached.

Our conclusion
Based on our activities, as described below, nothing has come to our attention to indicate that the 2022 data and information for the disclosures listed under 'Scope' and the table below are not fairly presented in the 2023 CDP Climate Change Questionnaire, in all material respects, in accordance with the reporting criteria.

Total Scope 1 GHG emissions	**24,930,415** MT CO_2e
Total Scope 2 GHG emissions (location-based)	**81,222** MT CO_2e (see Emphasis of matter)
Total Scope 3 GHG emissions (Consisting of categories 1, 2, 3, 4, 5, 6, 7, 11)	**21,483,697** MT CO_2e

Emphasis of matter
Without affecting our conclusion, we draw attention to Ameren's note in the CDP Climate Change Questionnaire sections C 6.3 and C.6.4 clarifying that they have excluded electricity use from the grid at Ameren's electricity generation facilities from their reported Scope 2 emissions. Including these facilities would materially increase their Scope 2 emissions. The information about this exclusion should be read in conjunction with the reported Scope 2 emissions data.

Our assurance activities
Considering the level of assurance and our assessment of the risk of material misstatement of the Selected Information a multi-disciplinary team of sustainability and assurance specialists performed a range of procedures that included, but was not restricted to, the following:

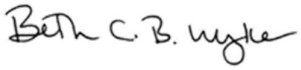
- Evaluating the appropriateness of the reporting criteria for selected information.
- Performing an analysis of the external environment, including a media search, to identify sustainability risks and issues in the reporting period that may be relevant to the assurance scope.
- Interviews with management representatives responsible for managing the selected issues.
- Interviews with relevant staff to understand and evaluate the management systems and processes (including IT systems and internal review processes and control processes) used for collecting and reporting the selected disclosures.
- A review at corporate level of a sample of qualitative and quantitative evidence supporting the reported information.
- An analytical review of the year-end data submitted by all locations included in the consolidated 2022 group data for the selected disclosures which included testing the completeness and mathematical accuracy of conversions and calculations, and consolidation in line with the stated reporting boundary.
- A review of the sample of data against the continuous emissions monitoring system (CEMS) data and other source data where relevant.
- Assessing the conversion and emission factors and assumptions used.
- Reviewing the presentation of information relevant to the scope of our work in the CDP Climate Change Questionnaire to ensure consistency with our findings.

The limitations of our engagement
The reliability of the assured information 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.

Our independence, integrity, and quality control
ERM CVS is an independent certification and verification body accredited by UKAS to ISO 17021:2015. Accordingly, we maintain a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements. Our quality management system is at least as demanding as the relevant sections of ISQM-1 and ISQM-2 (2022).

ERM CVS applies a Code of Conduct and related policies to ensure that its employees maintain integrity, objectivity, professional competence, and high ethical standards in their work. Our processes are designed and implemented to ensure that the work we undertake is objective, impartial and free from bias and conflict of interest. Our certified management system covers independence and ethical requirements that are at least as demanding as the relevant sections of the IESBA Code relating to assurance engagements.

ERM CVS has extensive experience in conducting assurance on environmental, social, ethical and health and safety information, systems and processes, and provides no consultancy related services to Ameren in any respect.



Beth Wyke
Head of Corporate Assurance Services
Malvern, PA

July 25, 2023

ERM Certification & Verification Services Incorporated
www.ermcvs.com | post@ermcvs.com