Welcome to your CDP Climate Change Questionnaire 2022

C0. Introduction

C0.1

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

Evergy is a public utility holding company incorporated in 2017 and headquartered in Kansas City, Missouri. Evergy operates primarily through the following wholly-owned direct subsidiaries listed below.
Evergy Kansas Central, Inc. (Evergy Kansas Central) is an integrated, regulated electric utility that provides electricity to customers in the state of Kansas.
Evergy Kansas Central has one active wholly-owned subsidiary with significant operations, Evergy Kansas South, Inc. (Evergy Kansas South).
Evergy Metro, Inc. (Evergy Metro) is an integrated, regulated electric utility that provides electricity to customers in the states of Missouri and Kansas.
Evergy Missouri West, Inc. (Evergy Missouri West) is an integrated, regulated electric utility that provides electricity to customers in the state of Missouri.
Evergy Kansas Central, Evergy Kansas South, Evergy Metro, and Evergy Missouri West conduct business in their respective service territories using the name Evergy. Evergy serves approximately 1,640,800 customers located in Kansas and Missouri. Customers include approximately 1,433,500 residences, 199,400 commercial firms and 7,900 industrial companies, municipalities, and other electric utilities. Evergy is significantly impacted by seasonality with approximately one-third of its retail revenues recorded in the third quarter.
Responses to all sections of this Survey do not include details on our financial performance. Details on our financial performance can be found on our investor website and in our public filings available through the U.S. Securities and Exchange Commission (SEC). Materiality and its relevant definition as used in this Survey, and our ESG materiality review process, is different than the definition used in the context of filings with the SEC. Issues deemed material for purposes of this Survey and for purposes of determining our ESG strategies may not be considered material for SEC reporting purposes.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years

Reporting year	January 1, 2021	December 31, 2021	No

C0.3

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

United States of America

C0.4

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

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Equity share

C-EU0.7

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

Row 1

Electric utilities value chain

Electricity generation
Transmission
Distribution

Other divisions

Smart grids / demand response
Battery storage
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	EVRG

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Board-level committee	Evergy's Nuclear, Power Supply, and Environmental Committee (NPSE) provides Board oversight on climate related issues and is responsible for: reviewing environmental policy and planning issues related to local, state, and federal air, water, electric, environmental, and waste matters; reviewing environmental reports prepared by management before public disclosure; and reviewing strategy and related risks, with respect to greenhouse gas and air emissions, water use, and toxic emissions and waste. During each NPSE meeting there is an update by Evergy's Vice President and Chief Compliance Officer, a presentation by the Vice President Generation, and a presentation by the Chief Nuclear Officer which include information on compliance with current regulations and status of proposed regulations, generation strategy, plant performance and climate related topics such as water usage, emissions, renewables, and extreme weather impacts. The NPSE provides feedback and direction on climate topics. The Committee meets at least quarterly. Evergy's Finance Committee provides oversight on the capital requirements, capital structure, and capital allocation strategy. This committee impacts climate and strategy through decisions and recommendations to the Board on annual budgets, including capital expenditures and investments including generation resources. The Committee meets at least quarterly. Evergy's Safety and Power Delivery Committee oversees power delivery, customer service, and information technology. This committee reviews strategy around transmission and distribution assets and compliance with laws, regulations, and standards relating to the ownership and operation of transmission and distribution assets and risks related to modernization of the power delivery grid, the impact of climate change, and the transition to renewable generation, the electrification of transportation and other sectors, and related resource requirements. The Committee meets at least quarterly. Evergy's Nominating, Governance, and Sustainability Committee oversees Evergy's Environmental, Social and Governance (ESG) programs and strategy. This committee receives quarterly updates. Decisions made by the full Board, related to climate topics, include the closure of

	coal generation sites which are the largest users and consumers of water and largest emissions emitters in the Evergy fleet.
Chief Executive Officer (CEO)	Evergy's Chief Executive Officer (CEO) has responsibility for climate-related issues on an ongoing basis as part of his role in overseeing members of Evergy's leadership team who are responsible for accounting and finance, legal and compliance, regulatory and policy, and operational activities. Climate-related issues that are considered include compliance with environmental regulations, air emissions, water availability, grid resilience and strategic planning and execution of Evergy's generation transition. Climate-related issues are discussed with the CEO as needed through individual meetings, meetings with the executive leadership team, discussions with individual Board members, and during full Board discussions. Decisions that impact climate include the resource planning assumptions and results from the Integrated Resource Plan (IRP) which guides generation portfolio resource planning and capital investments. The CEO is also updated on environmental compliance with current environmental regulations including climate and water regulations and the status and planning for compliance with proposed environmental regulations.

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 – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives	The Board reviews and oversees Evergy's strategy, business plans, risk assessments and mitigation plans, and the resolution of critical issues as they arise. Several Board-level committees engage on climate-related issues as climate impacts are embedded in quarterly updates and decisions made by the Board. As an electric utility with a net-zero carbon target, climate-related decisions are at the core of strategic, operational, financial including capital allocation, and compliance decisions. The Board receives reports from each Board committee that has responsibility for environmental and climate-related matters. Each committee meets at least quarterly. The Board and Board-level committees monitor company performance, review and guide major plans of action, and review and guide the company's ESG strategy. Evergy's NPSE committee provides Board-level

	Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	responsibility in reviewing Evergy's strategy regarding power supply resources. The strategy and plans associated with power supply impact water strategy and air emissions based on the mix of generation resources The NPSE committee also reviews Evergy's compliance with environmental laws, regulations, and standards. The NPSE committee receives quarterly updates regarding environmental compliance performance and associated regulations from Evergy's Chief Compliance Officer; which include tracking of environmental initiatives such as Evergy's development and disclosure of the environmental and water policy and the status of water resilience assessments. The Vice President Generation and Chief Nuclear Officer present on climate-related topics such as water usage and extreme weather impacts and environmental related project execution. Evergy's Finance Committee provides oversight on capital requirements, capital structure, and capital allocation strategy. The Finance Committee reviews and makes recommendations regarding Evergy's annual budget, including significant capital expenditures. This committee impacts water use, air emissions, and strategy as it impacts the investments into varying generation methods. Evergy's Nominating, Governance, and Sustainability Committee oversees Evergy's ESG programs and strategy. Through this committee and quarterly updates, the Board guides the corporate ESG strategy. Evergy's Safety and Power Delivery Committee oversees Evergy's power delivery, customer service, and information technology. This Board committee receives quarterly updates and reviews Evergy's strategy with respect to transmission and distribution assets and compliance with laws, regulations, and standards relating to the ownership and operation of transmission and distribution assets. The Safety and Power Delivery Committee oversees strategies and risks related to modernization of the power delivery grid, the impact of climate change, and the transition of the grid to support increased renewable generation, increased electrification of transportation and other sectors, and related resource requirements.

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	Criteria to determine Board member competency on climate related issues is determined by educational and career experiences. Evergy has several Board members who are competent on climate-related issues. Relevant Evergy Board members with competence on climate-related issues and relative experience include former Chair of the Senate Energy and Natural Resources Committee, who is now a current policy advisor for a law and government relations firm that specializes in energy, environment, and natural resources laws. Evergy's Board also includes several members who have extensive nuclear and electric utility experience and education, as well as several other members with educational backgrounds in engineering. These experiences have aided in their understanding of climate related issues within the electric utility industry. In addition, another competency that has been deemed important by the Board is an ESG competency. The competency surrounding this topic is evaluated based on a Board member's relevant director experience, qualifications, attributes, and skills related to ESG matters. This may include, but is not limited to, executive or Board experience at companies with acceptable sustainable business solutions and/or companies that seek to disrupt the utility industry using renewable energy and storage solutions; academic research, regulation, legislation, and/or consulting expertise in ESG matters. Evergy also considers executive or Board experience in developing diverse supply chains or diverse boards of directors, management teams or employee workforces, in determining Board member competency. All Evergy Board members consider themselves to be experienced to moderately experienced in ESG matters.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues

Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Chief Financial Officer (CFO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Chief Operating Officer (COO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Other C-Suite Officer, please specify Senior Vice President Public Affairs and Chief Customer Officer	Both assessing and managing climate-related risks and opportunities	Quarterly
Other C-Suite Officer, please specify Chief Compliance Officer	Both assessing and managing climate-related risks and opportunities	Quarterly

C1.2a

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

Evergy's CEO has direct responsibility for climate-related issues including setting strategy and oversight of carbon emissions reductions. Key elements of that responsibility include leading strategic resource planning and capital allocation, setting annual budgets, leading climate related decisions and assessments, making decisions for the direction of research and development investments and innovations, and assessing climate-related controls and compliance. The CEO is the direct leader of the most senior officers within Evergy. This includes the Chief Financial Officer, Chief Operating Officer, Senior Vice President Public Affairs and Chief Customer Officer and General Counsel and Corporate Secretary. Evergy's Chief Compliance Officer reports to the General Counsel and Corporate Secretary.
The Chief Financial Officer (CFO) oversees Evergy's financial matters. This role impacts climate-related issues by setting budgets and allocating resources for operations and maintenance spend versus capital allocation. Evergy's capital allocation and investments affect climate-related issues by directing funds towards renewable technology for generation and by allocating financial resources to maintain Evergy's coal-fired facilities and associated environmental controls systems. Evergy's CFO oversees the company's renewable development process, investor relations and supply chain functions. These areas conduct activities that impact climate-related issues. Renewable development moves the generation transition strategy forward by actively working to increase the company's ownership or access to additional renewable resources. Investor Relations includes gauging investor interests on environmental matters. Supply chain management engages with different suppliers on environmental topics and climate impacts.

The Chief Operating Officer (COO) oversees generation, transmission, and distribution operations. The COO's oversight includes long term planning and grid modernization. The long-term planning process includes a full-scale assessment of the generation fleet to determine the necessary assets to meet customers' needs, while balancing which assets are in the best interest of the company to continue to operate. The COO's planning and implementation of the generation transition to renewables directly impacts how climate-related issues are addressed within Evergy. In addition, through ensuring optimal plant function of the coal-fired facilities, impacts to the environment are minimized. The retirement of fossil fuel generation facilities and investment into renewables impacts Evergy's ability to meet emission reduction goals.
The Senior Vice President Public Affairs and Chief Customer Officer oversees legislative and regulatory activities that support the company's strategy to provide reliable, affordable, and sustainable energy to our customers including the transition of our generation fleet to owning and operating more renewable energy. This role also focuses on the implementation of programs for customers that support energy efficiency, access to renewable energy, and electric vehicle usage. The company's specialized retail customer programs help to lower our carbon intensity by providing customers access to renewable generation sources that were previously inaccessible due to physical access or considered cost prohibitive. Evergy also offers tariff programs for large commercial and industrial customers that provide a turn-key solution to obtain wind energy.
Evergy's Chief Compliance Officer oversees ethical concerns and the company's compliance with laws and regulations, including environmental compliance which consists of air, water, and waste programs. Evergy has many air, water, and waste permits that are issued by the federal government or by the States of Kansas, Missouri and Oklahoma. Compliance with these permits minimizes Evergy's impact to the environment. Evergy's Chief Compliance Officer monitors the company's performance on environmental topics and status of proposed regulations to ensure they remain compliant. The Chief Compliance Officer also provides quarterly updates to the Board on environmental and climate matters. This role oversees several individuals who review federal and state environmental regulation and policy, and engage with regulators and stakeholders who are interested in Evergy's management of environmental programs. Individuals that report through the Chief Compliance Officer are also responsible for calculating the company's emissions, water and waste related metrics, and overseeing climate-related assessments. These compliance and climate-related assessments are reported to management and the Board.

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	

C1.3a

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

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Corporate executive team	Monetary reward	Other (please specify)	The corporate executive team's ability to execute on the company's generation transition strategy impacts Evergy's earnings per share (EPS) and stock price. EPS and stock price performance are a significant portion of the corporate executive team's compensation. Therefore, Evergy's Corporate executive team is incentivized to execute the generation transition strategy and drive higher EPS and stock price performance. In addition, in 2022 a metric was added to the long-term incentive plan based on total megawatts of owned renewable additions by year-end 2024 or buy-ins of purchase power agreements. This incentive supports the company's generation transition strategy.

C2. Risks and opportunities

C2.1

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

Yes

C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	5	Short Term – Present to 5 years
Medium-term	5	15	Medium – 5-15 years
Long-term	15	25	Long-Term – 15-25 years

C2.1b

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

Evergy utilizes an Enterprise Risk Management (ERM) framework that aligns top business risks with management responsibilities, and ultimately Board of Director (Board) level oversight of these risks. The Board is responsible for the oversight of all of the company's major risks (as

well as mitigation plans) including strategic, financial, operational, and compliance risks. The Board has delegated some specific risk oversight responsibility to its committees, as provided in the committee charters. At least once each year (see C2.2 for an overview of the process), the full Board receives a report from management of key risks and related mitigation plans following an extensive and iterative analysis. Management also incorporates risk and mitigation into its regular presentations to the Board.

Evergy's ERM process is designed and implemented to influence Evergy's strategy, drive insight and improved performance in day-to-day operations, and enhance the effectiveness of mitigation efforts. Evergy's ERM process is not conducted with an eye toward avoiding all risk, but rather with a goal of enhancing the company's ability to identify and appropriately mitigate risks across current and future business strategies. Evergy believes this ERM process is important because it provides a structure to identify risks and related mitigation activities. In addition, it provides the framework to report to the Board on the key risks for the enterprise, including key climate risks.

Evergy uses likelihood and impact parameters during our risk assessment discussions. There are 5 categories of impact: Minor (1), Moderate (2) Significant (3), Major (4) and Critical (5) and likelihood of Remote (1), Rare (2), Possible (3), Likely (4) and Probable (5). These categories have various estimated financial, operational (includes customer and employee impacts), compliance (includes health and safety impacts), reputational and security thresholds based on the impact and likelihood of an event. Risk Owners annually review and rank each risk based on impact and likelihood of the risk event occurring. The impact is then multiplied by the likelihood to get a total risk score.

For example: Critical Impact with a Probable likelihood (5x5=25) would have a financial threshold of greater than $40 million. These may or may not be interdependent. For example, we could have a risk that has an estimated potential impact of greater than $40 million but has no operational or compliance impact. Two representative examples are provided below for each category, but the examples are not all encompassing:

· Operational thresholds for the Critical score items include: inability to serve the majority of the company's customer base or a high-profile service territory for an extended period of time (i.e., greater than 5 days) or loss of material generating capacity for an extended period of time (i.e., greater than 500 MW for greater than 12 months.)

· Compliance threshold examples for the score level include: items such as material fines, sanctions, indictments, allegations, or proceedings resulting from potential compliance violations, pervasive health hazards, significant injuries or fatalities to employees or customers.

· Reputational threshold examples for the score level include: material impact to Evergy's trustworthiness in the market place or national negative headlines for a prolonged period of time.

· Security threshold examples for the score level include: cybersecurity incident resulting in the loss of ability to control the bulk electric system or privileged access credentials are compromised.

To calculate the top business risks, the risks with the highest total calculated score (substantial risks) are flagged. ERM considers a risk substantial if the total score (likelihood x impact) is 15 or above, resulting in a potential financial impact range of $10 million to greater than $40 million. A second view is then utilized to determine what the top risks are collectively. This approach considers all risks and the impact they can have to the company when combined, thus each risk is assigned a classification to allow for the risks to be grouped together to provide an enterprise-wide view of the key risks. Examples of classification categories include

(but are not limited to): Business Continuity & Resiliency, Culture, Customer Expectations, Cybersecurity, Environmental, Social and Governance (ESG), and Regulatory & Legislative. **Materiality and its relevant definition as used in this Survey, and our ESG materiality review process, is different than the definition used in the context of filings with the SEC. Issues deemed material for purposes of this Survey and for purposes of determining our ESG strategies may not be considered material for SEC reporting purposes.**

C2.2

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

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

An integrated risk assessment is performed annually to identify and evaluate operational risks, strategic risks, and externally imposed risks. A risk owner is assigned to each enterprise risk and is responsible for reviewing and updating existing risk(s) and for developing and managing the mitigation strategy. We then hold risk conversations to identify new, emerging, interdependent, or hidden risks that are not captured, and quantify and calibrate risks across the company based on their relative impact and likelihood. This approach acts as a precursor to identify threats and potential losses, as well as uncover potential opportunities and rewards.
Given that risks may present multiple impacts to the same business objective, we perform a detailed analysis to understand how risks and opportunities are interrelated. Additionally, interdependencies can occur where multiple risks impact one business objective or where one risk triggers another.
Risk owners have discussions on root cause analysis, consequences, mitigation, and key risk indicators for the company's top business risks and notable emerging risks and opportunities which explore the risk at a granular level to understand the root-cause, consequences, and necessary mitigation efforts.
During the 2021 ERM process, Evergy's Sustainability staff joined the ERM staff in meetings with groups across each of Evergy's business units to identify and assess climate-related risks. Individual business units were asked to identify risks using the

Task Force on Climate-related Financial Disclosure (TCFD) framework, weight them, and prioritize mitigation activities.
Results were categorized based upon risk type and impact over all time horizons. The risk categories below were developed using TCFD recommendations and Evergy's weighting process:
• Physical Risks
• Generation Transition Risks
• Public Policy and Regulatory Risks
• Financial and Reputational Risks
• Customer Impact Risk

(Transition case study-CDP's STAR method)
Situation:
The power sector plays a crucial role in the transition to a low carbon economy. Recently, our customers, regulators, and investors have expressed support for Evergy to provide lower carbon-emitting energy. Our climate risk assessment considers the various risks associated with reducing our carbon intensity – for example, how to balance reducing our carbon intensity, while maintaining reliability and affordability.
Task:
Evergy needs to transition to a cleaner generation fleet which creates risks and opportunities for the company. One of our key objectives is executing our carbon goals, which includes lowering emissions with a reduction in coal generation consistent with our Integrated Resource Plan (IRP), increased use of renewables, and capitalizing on new technologies as they become available, in order to ensure that the generation transition also maintains affordability and reliability.
Action:
We manage this transition through our IRP and related implementation steps. The IRP seeks to balance reliable service, at an affordable cost, with sustainability and achieving the company's emissions reductions targets. The IRP is a triennial plan with annual updates.
Result:
After extensive analysis, we selected a Preferred Resource Plan (Plan) from the IRP scenario analysis based on the outcomes it will deliver to key stakeholders. The Plan secures safe, reliable, affordable and sustainable power for our customers and enables a stable base of generation sources, evolving at a pace that lets us extract benefits from existing facilities while leveraging advancing technology and emerging, affordable energy sources, and reducing cost and reliability risk through thoughtful portfolio diversification. The Plan's flexibility, especially through the post-implementation period, allows us to focus on reliability, affordability and sustainability while adapting to environmental, technological, and market opportunities and challenges.
Summary: The Plan reflects our targets to reduce carbon emissions 70% by the end of 2030 (relative to 2005 levels) and allows us to work toward a goal of net-zero carbon emission by 2045 through the ongoing diversification of our generation portfolio to include more cost-effective renewables, the continued operation of our zero carbon Wolf Creek Nuclear Operations Center (WC), and the retirement of more than 4,000 MW of fossil generation over the next 20 years. By 2040, the Plan also includes an incremental 1,300 MW of peak demand reduction from energy efficiency and demand response

programs. Investments in energy efficiency and strategies to shape the demand curve are an integral part of our Plan.

(Physical case study):
Situation:
Physical risks that impact Evergy's service territory range from high-impact, low-frequency events such as tornadoes, extreme temperatures (e.g., polar vortices), severe drought, and flooding to routine weather events such as severe thunderstorms, wind events, and periods of high or low rainfall. These acute impacts are compounded by chronic issues such as long-term temperature changes, periods of drought, and ecological shifts.
Task:
Harden and make a smarter grid to improve reliability.
Action:
Evergy's Board approved an investment plan to enhance reliability, advancing and ensuring the resilience of our more than 10,000 miles of transmission lines and 60,000 miles of distribution lines that span across the high vegetation regions of the Kansas City metro areas through the rural grasslands on the Kansas plains. We are modernizing our grid, leveraging technology, and implementing an innovative vegetation management program.
Results:
In 2021, we invested nearly $2 billion across our system, with the largest portion focused on our transmission and distribution network. The investment is focused on replacing aging equipment and modernizing the grid, driving benefits for customers by improving reliability, enhancing resiliency and the ability to withstand extreme weather, and increasing security. Additionally, this Transmission grid improvement is needed to ensure that most carbon reducing value is extracted from the renewable generation we have and intend to add to meet our customers' needs. As we advance the use of smart grid technologies and transition toward a lower-cost, lower emissions generation fleet and upgraded customer systems, our investments will also enable us to reduce costs to serve customers. Our capital investment plan targets $10.7 billion of investment through 2026, including a plan to invest nearly $2 billion in new renewable generation resources.

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	Evergy plans to make significant capital investments in renewable generation and to enhance the customer experience, improve reliability and resiliency, and improve efficiency, which are expected to be funded by cash flows from operations, debt, and equity as required; these investments could be impacted by regulatory outcomes. Typically, utilities are allowed to recover costs in customer rates that

		were prudently incurred to provide utility service, plus a reasonable return on invested capital. There can be no assurance, however, that regulators will determine costs to have been prudently incurred. Further, the amounts approved by the regulators may not be sufficient to allow for a recovery of costs or provide for an adequate return on and of capital investments. Amounts approved by regulators may be appealed, modified, limited, or eliminated by subsequent regulatory or legislative actions. A failure to recover costs or earn a reasonable return on invested capital could have a material adverse effect on the results of operations, financial position, and cash flows of Evergy and its utility subsidiaries (Evergy Companies). Failure to timely recover the full investment costs of capital projects, the impact of renewable energy and energy efficiency programs, other utility costs and expenses due to regulatory disallowances, regulatory lag or other factors could lead to lowered credit ratings, reduced access to capital markets, increased financing costs, lower flexibility due to constrained financial resources and increased collateral security requirements or reductions or delays in planned capital expenditures. Evergy may utilize legislative mechanisms known as securitization to facilitate the retirement of coal-fired generation, which will eliminate future returns on the investment that was originally made by Evergy in those coal-fired generating facilities and reduce the Evergy's Companies results of operations and financial position. No assurance can be given that Evergy will be successful in implementing this strategy in a timely manner or at all, and a failure to do so could have a material adverse effect on the results of operations, financial position and cash flows of Evergy and have an adverse impact on the price of Evergy’s common stock.
Emerging regulation	Relevant, always included	Costs to comply with environmental laws and regulations, including those relating to air and water quality, waste management and hazardous substance disposal, protected natural resources and health and safety, are significant and may adversely impact operations and financial results. Evergy is subject to extensive and evolving federal, state, and local environmental laws, regulations and permit requirements relating to air and water quality, waste management and hazardous substance disposal, protected natural resources (such as wetlands, endangered species, and other protected wildlife) and health and safety. In general, over time these laws and regulations have become and continue to become increasingly stringent and compliance with these laws and regulations require an increasing share of capital and operating resources, which may reduce the amount of resources available for other business objectives, including capital investments to move our generation transition forward.

		Compliance with these laws, regulations and requirements requires significant capital and operating resources. Regulators may also disagree with Evergy's interpretation or application of these laws, regulations, and requirements. The failure to comply with these laws, regulations and requirements could result in substantial fines, injunctive relief, and other sanctions. For example, Evergy Kansas Central recently decommissioned the Tecumseh Energy Center and removed all coal combustion residuals (CCRs) from a surface impoundment in a manner it believed complied with federal law, but the EPA has recently commenced an evaluation of whether Evergy Kansas Central should have taken additional or alternative actions, even though the facility is closed and all CCRs have been removed. The EPA has begun issuing CCR Part A rule extension application determinations for companies that applied for approval to operate unlined or clay-lined impoundments past April 2021. Evergy did not apply for an extension; however, these proposed determinations include extensive CCR rule interpretations and compliance expectations that may impact all owners of CCR units. The new interpretations could require modified compliance plans such as different methods of CCR unit closure. Additionally, more stringent remediation requirements for units that are in corrective action or forced to go into corrective action could result in substantial costs or operational impacts and ultimately impact our transition strategy.
Technology	Relevant, always included	Technological advances, energy efficiency and other energy conservation measures have reduced and will continue to reduce customer electricity consumption. The Evergy Companies generate electricity at central station power plants to achieve economies of scale and produce electricity at a competitive cost. Self-generation and distributed generation technologies, including microturbines, wind turbines, fuel cells and solar cells, as well as those related to the storage of energy produced by these systems, have become economically competitive with the manner and price at which the Evergy Companies sell electricity. There is also a perception that generating or storing electricity through these self or distributed generation technologies is more environmentally friendly than generating electricity with fossil fuels or with other large-scale central generation facilities. Increased adoption of these technologies could reduce electricity demand and the pool of customers from whom fixed costs are recovered, resulting in under recovery of the fixed costs of the Evergy Companies. Increased self-generation and the related use of net energy metering, which allows self-generating customers to receive bill credits for surplus power, could put upward price pressure on remaining customers. If the Evergy Companies are unable to adjust to reduced electricity demand and

		increased self-generation and net energy metering, their financial condition and results of operations could be adversely affected.
Legal	Relevant, always included	Evergy is party to various lawsuits and regulatory proceedings in the ordinary course of their respective businesses. The outcome of these matters cannot be determined, nor, in many cases, can the liability that could potentially result from each case be reasonably estimated. The liability that Evergy may incur with respect to any of these cases may be in excess of amounts currently accrued and insured against with respect to such matters and could adversely impact the financial results for Evergy. Environmental permits are subject to periodic renewal, which may result in more stringent permit conditions and limits. New facilities, or modifications of existing facilities, may require new environmental permits or amendments to existing permits. Delays in the environmental permitting process, public opposition and challenges, denials of permit applications, limits or conditions imposed in permits and the associated uncertainty may materially adversely affect the cost and timing of projects, and thus materially adversely affect the results of operations, financial position, and cash flows of Evergy. In addition, compliance with environmental laws, regulations and requirements could alter the way assets are managed, which in turn could result in retiring assets earlier than expected, recording asset retirement obligations (AROs), or having a regulator disallow recovery of costs that had been prudently incurred in connection with those assets. There is also a risk of lawsuits alleging violations of environmental laws, regulations, or requirements, claiming creation of a public nuisance or other matters, and seeking injunctions or monetary damages or other relief.
Market	Relevant, always included	Evergy Kansas Central, Evergy Metro and Evergy Missouri West are members of the SPP regional transmission organization, and each has transferred operational authority (but not ownership) of their transmission facilities to the SPP. The SPP's Integrated Marketplace determines which generating units among market participants should run, within the operating constraints of a unit, at any given time. The SPP's rules are primarily designed to provide for maximum cost-effectiveness, but in certain respects the rules also provide preferential treatment for certain resources based on public policy initiatives, such as increasing the deployment of renewable generation. If Evergy Kansas Central's, Evergy Metro's or Evergy Missouri West's generating resources are not dispatched, each could experience decreased levels of wholesale electricity sales.

		Evergy's strategic plan includes adding a significant amount of renewable generation. Transmission constraints and delays in the transmission planning and construction processes could impair the ability of Evergy to sell and transmit electricity generated by these renewable generation facilities, which could have an adverse impact on the results of operations and financial position of Evergy. In addition, the rules governing the various regional power markets, including the SPP, may change from time to time and such changes could impact the costs and revenues of Evergy.
Reputation	Relevant, always included	The price of Evergy common stock may be volatile. Some of the factors that could affect the price of Evergy common stock are Evergy's earnings; the ability of Evergy to implement its strategic plan; the ability of Evergy to deploy capital; actions by regulators; and statements in the press or investment community about the Evergy Companies' strategy, earnings per share or growth prospects, financial condition, or results of operations. Negative perceptions or publicity from increasing scrutiny of Evergy's environmental, social and governance practices could also adversely impact Evergy's stock price. Also, individuals or entities, such as activist shareholders and special interest groups, may seek to influence Evergy's strategic plan or take other actions that could disrupt the Evergy Companies' business, financial results or operations and could adversely impact Evergy's stock price. In addition, Evergy operates almost exclusively in Kansas and Missouri and this concentration may increase exposure to risks arising from unique local or regional factors. Furthermore, general market conditions and U.S. economic factors and political events unrelated to the performance of Evergy (including the COVID-19 pandemic) may also affect Evergy's stock price. For these reasons, shareholders should not rely on historical trends in the price of Evergy common stock to predict the future price of Evergy's common stock. Evergy's strategic plan includes enhanced technology and transmission and distribution investments and a further reduction in coal generation consistent with our IRP. Evergy will need to attract and retain personnel that are qualified to implement our strategy and may need to retrain or reskill certain employees to support Evergy's long-term objectives. A failure to attract and retain qualified employees, retrain, or reskill existing employees and maintain satisfactory collective bargaining agreements could have a significant adverse impact on the results of operations, financial position, and cash flows of Evergy. In the same way, Evergy will need to identify and contract with qualified third-party suppliers and contractors to execute Evergy's strategy. A failure to identify and contract with qualified third-party suppliers and contractors could have a significant adverse impact on the results of operations,

		financial position, and cash flows of Evergy.
Acute physical	Relevant, always included	Weather conditions directly influence the demand for and price of electricity. Evergy is significantly impacted by seasonality, and, due to energy demand created by air conditioning load, highest revenues are typically recorded in the third quarter. Unusually mild winter or summer weather can adversely affect sales. In addition, severe weather and events, including tornados, snow, fire, rain, flooding, drought, and ice storms, can be destructive and cause outages and property damage that can result in increased expenses, lower revenues and additional restoration costs. Storm reserves established by Evergy may be insufficient and rates may not be adjusted in a timely manner, or at all, to recover these costs.
Chronic physical	Relevant, always included	Because many of Evergy's generating stations utilize water for cooling, low water and flow levels can increase maintenance costs at these stations, result in limited or in extreme circumstances no power production, and/or require modifications to plant operations. High water conditions can also impair planned deliveries of fuel to generating stations or otherwise adversely impact the ability of Evergy to operate these stations. Climate change may produce more frequent or severe weather events, such as storms, droughts or floods and could also impact the economic health of Evergy's service territories. An increase in the frequency or severity of extreme weather events or a deterioration in the economic health of Evergy's service territories could have a material adverse effect on the results of operations, financial position, and cash flows of the Evergy Companies.

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

The Evergy Companies are committed to a long-term strategy to reduce CO2 emissions in a cost-effective and reliable manner. In 2021, Evergy achieved a reduction of CO2 emissions by about half from 2005 levels. Evergy has a goal to achieve net-zero CO2 emissions by 2045, which includes an interim goal of a 70% reduction of CO2 emissions from 2005 levels by 2030. The trajectory and timing of reaching Evergy's net-zero CO2 emissions goal are dependent on enabling technology developments, the reliability of the power grid, and supportive energy policies and regulations and could also be impacted by political, legal, and regulatory actions. Public attention is currently focused on transitioning to a low carbon future, including reducing GHG emissions and closing coal-fired generating units; reliability and affordability are also major areas of focus for the public. Diversity of fuel supply has historically provided cost and reliability benefits. For example, because renewable generation is intermittent, diversity of baseload generation, including a mix of nuclear, coal and natural gas, has helped to maintain a consistent availability of power across different seasons and weather conditions. In addition, the Evergy Companies must prudently utilize the existing generation assets that regulators have allowed the Evergy Companies to include in rates. The Evergy Companies use a triennial IRP process, which is a detailed analysis that estimates factors that influence the future supply and demand for electricity, to inform the manner in which they plan to supply electricity in the future. The IRP considers forecasts of future electricity demand, fuel prices, transmission improvements, new generating capacity, cost of environmental compliance, integration of renewables, energy storage, energy efficiency and demand response initiatives.
We also updated our capital investment plan following our IRP process to reflect a targeted $10.7 billion of investment through 2026, including a target of nearly $2 billion of new renewable generation resources. This target is made up of a projected and approximate spend of $1.2 billion in wind investments and $0.8 billion in solar investments.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

2,000,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The Evergy Companies are committed to a long-term strategy to reduce CO2 emissions in a cost-effective and reliable manner. In 2021, Evergy achieved a reduction of CO2 emissions by about half from 2005 levels. Evergy has a goal to achieve net-zero CO2 emissions by 2045, which includes an interim goal of a 70% reduction of CO2 emissions from 2005 levels by 2030. The trajectory and timing of reaching Evergy's net-zero CO2 emissions goal are dependent on enabling technology developments, the reliability of the power grid, and supportive energy policies and regulations and could also be impacted by political, legal, and regulatory actions.

To meet Evergy's goal to achieve net-zero CO2 emissions by 2045, the IRP planning process involves forecasting a variety of Evergy's key metrics, such as emissions, fuel costs, operating costs, carbon emissions costs, and capital costs, out 15 to 20 years based on our customers' expected energy and capacity needs. This process of evaluating Evergy's resource plan under a variety of different scenarios and selecting a "Preferred Resource Plan" takes place in full every three years with annual updates each year between triennial filings.

Evergy's approach to address climate change is largely embedded in the IRP planning process. Consistent with the results of the IRP process, we have a target of nearly $2 billion of new renewable generation resources. This target is made up of a projected and approximate figure of $1.2 billion in wind investments and $0.8 billion in solar investments through 2026.

Cost of response to risk

2,000,000,000

Description of response and explanation of cost calculation

To meet Evergy's goal of net-zero CO2 emissions by 2045, the IRP process involves forecasting a variety of Evergy's metrics, such as emissions, fuel costs, operating costs, carbon emissions costs, and capital costs, out 15 to 20 years based on our customers' expected energy and capacity needs.
Within the IRP, there is a scenario planning process that Evergy uses to test potential resource plans and evaluate their sensitivity to a variety of factors that are outside of Evergy's control.
The IRP process includes three factors to develop scenarios for analysis: load growth, natural gas prices, and CO2 pricing.
• Load Growth: The range between low, mid, and high load growth is modeled based on varying "typical" load growth drivers – population and economic growth – and assuming

varying levels of electrification.
• Natural Gas Prices: Evergy's current low natural gas price assumption aligns with gas prices that have been seen in the five years from 2016 through the end of 2020. The mid and high scenarios are based on external forecasts that are higher, particularly in the 2030-40 window, than the trend in natural gas prices from 2016 to 2020. The increase in natural gas prices in 2021 and in the first half of 2022 relative to 2016-2020 levels is a reflection of the importance of using a range of forecast assumptions.
• CO2 Pricing: Evergy uses a range (low, mid, and high) of CO2 pricing assumptions as a direct method of testing the sensitivity of a resource plan to climate-related factors.
When developing potential resource plans, Evergy considers its resource portfolio, and a variety of new supply-side or demand-side resources to be used to meet customers' energy and capacity needs.
The evaluation of different resource plans across the different scenarios results in the calculation of a Net Present Value of Revenue Requirement (NPVRR) over the planning period, which is the primary factor in selecting a Preferred Resource Plan given that NPVRR is a good indicator of value created for customers. In addition to NPVRR, Evergy calculates CO2 reductions compared to 2005 levels, environmental compliance costs, and a variety of metrics that are factored into the evaluation of each resource plan.
Consistent with the results of our IRP process we have a target of nearly $2 billion of new renewable generation resources. This target is made up of projected and approximate figures of $1.2 billion in wind investments and $0.8 billion in solar investments through 2026.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical
Cold wave/frost

Primary potential financial impact

Other, please specify

Increased direct costs, increased indirect (operating costs), increased capital expenditures, decreased revenues due to reduced demand, decreased revenues due to reduced production capacity.

Company-specific description

Weather conditions directly influence the demand for and price of electricity. Evergy is significantly impacted by seasonality, and, due to energy demand created by air conditioning load, highest revenues are typically recorded in the third quarter. Unusually

mild winter or summer weather can adversely affect sales. In addition, severe weather, and events, including tornados, snow, fire, rain, flooding, drought, and ice storms, can be destructive and cause outages and property damage that can result in increased expenses, lower revenues, and additional restoration costs. Storm reserves established by Evergy may be insufficient and rates may not be adjusted in a timely manner, or at all, to recover these costs. Additionally, because many of Evergy's generating stations utilize water for cooling, low water and flow levels can increase maintenance costs at these stations, result in limited and in extreme cases potentially no power production, and/or require modifications to plant operations. High water conditions can also impair planned deliveries of fuel to generating stations or otherwise adversely impact the ability of Evergy to operate these stations. Climate change may produce more frequent or severe weather events, such as storms, droughts or floods and could also impact the economic health of Evergy's service territories. An increase in the frequency or severity of extreme weather events or a deterioration in the economic health of Evergy's service territories could have a material adverse effect on the results of operations, financial position, and cash flows of the Evergy Companies.

One example:
As a result of an outbreak of cold air that migrated in early February 2021 from the North Pole to southern Canada and the north central United States, cold temperatures, wind chills and snow began to arrive in North Dakota, traveling through Missouri and other Midwestern states, hitting Texas and portions of the Gulf Coast. According to the National Oceanic and Atmosphere Administration (“NOAA”), this cold-air outbreak across the central United States from February 10 through 19 – now known as Winter Storm Uri – brought frigid temperatures, snow and ice to the northern Plains down to southern Texas. It was the coldest event across the contiguous United States in more than 30 years and caused power outages for nearly 10 million people. Such temperatures resulted in rolling electrical blackouts and extreme natural gas price spikes.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

365,500,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

As part of the February 2021 winter weather event, Evergy incurred natural gas and purchased power costs, net of wholesale revenues, of $365.5 million. This $365.5 million of net fuel and purchased power costs was primarily driven by $296.4 million of costs at Evergy Missouri West and $133.9 million of costs at Evergy Kansas Central, partially offset by $64.8 million of net wholesale revenues at Evergy Metro. The amount of purchased power costs incurred by the Evergy Companies during the February 2021 winter weather event is subject to resettlement activity and further review by the SPP. While this financial figure does not represent all potential risks Evergy faces that arise from unpredictable/extreme weather, it was included here as a very specific example of the types of risks Evergy prepares for.

Cost of response to risk

1,400,000,000

Description of response and explanation of cost calculation

The $1.4 billion in capital investment in our transmission and distribution system in 2021, and our ongoing five-year capital investment plan, reflect several areas of focus. For our distribution grid, Evergy upgrades and replaces distribution assets including conductors, poles, circuit breakers, transformers, reclosers and comm/monitoring equipment to address asset conditions and to enable operational efficiencies and improved reliability. Our transmission grid investments include connecting new wind and solar assets and improving the system to reduce congestion on the transmission system and realize the benefits of new zero-carbon generation assets, as well as replacing and upgrading aging systems and equipment to enable operational efficiencies and improved reliability. Critical assets are hardened, replaced, and strengthened to ensure that substations, overhead and underground wires, poles, etc., are achieving requisite performance standards; Evergy invests in contingencies for critical transformers and feeders. Investments are being made in distribution automation and technology to support changing demand/response dynamics and EV integration, using machine learning and artificial intelligence and process automation to digitalize operations, achieve visibility on grid operations, and enable customer choices.

Beyond those capital investments, Evergy has multiple emergency operations preparedness and response plans in place to prepare for extreme weather events and emergency conditions. It utilizes the Extreme Weather Operations plan that details the actions required during such weather, including step by step directions for conducting manual load shed activities.

Evergy also maintains a Loss of Control Center functionality plan that allows for operations to be resumed within a short amount of time in the event the primary Transmission Control Center loses operational capability.

Specifically, regarding the February 2021 winter weather event, Evergy followed its normal preparation activities for the 2020-21 winter weather season in accordance with Evergy's winter preparedness process which follows the North American Electric Reliability Corporation's ("NERC") Generating Unit Winter Weather Readiness Reliability Guideline.

Following the conclusion of Winter Storm Uri, Evergy initiated an internal event analysis process across all business units impacted by the event to identify and document areas of improvement, good performance, and lessons learned.

Comment

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Other, please specify

EE/DSM enables Evergy to provide programs to customers to not only lower demand during peak periods but also drive long-term energy efficiency

Primary potential financial impact

Other, please specify

Increased revenues from sharing cost savings with customers

Company-specific description

The Evergy Companies have implemented, and continue to offer, energy efficiency programs to help customers with their energy efficiency needs and to help manage energy costs. Both Missouri and Kansas have passed legislation promoting the implementation of cost-effective demand-side management programs and allowing for the recovery of these program costs from customers, along with the potential to earn performance incentives based upon certain criteria.

In Missouri, Evergy Metro and Evergy Missouri West currently offer a suite of energy efficiency programs for customers under the Missouri Energy Efficiency Investment Act (MEEIA). The current portfolio of programs was approved by the Missouri Public Service Commission (MPSC) in 2019 and provides for the recovery of program costs,

throughput disincentive and the opportunity to earn a performance incentive based upon demand and energy savings achieved. The costs of the programs are recovered from customers through a rider mechanism. Evergy Metro's and Evergy Missouri West's current MEEIA programs as authorized by the MPSC expire at the end of 2023.

In Kansas, Evergy Kansas Central and Evergy Metro requested Kansas Corporation Commission (KCC) authorization in December 2021 for a suite of energy efficiency programs for customers under the Kansas Energy Efficiency Investment Act (KEEIA). The requested portfolio of programs would provide for the recovery of program costs, throughput disincentive and the opportunity to earn a performance incentive based upon demand and energy savings achieved. The costs of the program would be recovered from customers through a rider mechanism. Evergy Kansas Central's and Evergy Metro's proposed programs would be effective in 2023 and would expire in 2026. The KCC's decision on Evergy Kansas Central's and Evergy Metro's KEEIA request is expected in the second half of 2022.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

17,965,408

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The Evergy Companies have implemented, and continue to offer, energy efficiency programs to help customers with their energy efficiency needs and to help manage energy costs. Both Missouri and Kansas have passed legislation promoting the implementation of cost-effective demand-side management programs and allowing for the recovery of these program costs from customers, along with the potential to earn performance incentives based upon certain criteria.

In Missouri, Evergy Metro and Evergy Missouri West currently offer a suite of energy efficiency programs for customers under MEEIA. For purposes of this survey, performance incentives are defined as represented in the MEEIA Cycle 3 2019-2022 filing. There is a calculation matrix, approved by the MPSC that is used to determine

this earnings opportunity. It is based upon multiple factors, including Evergy's achievement of energy and demand savings, as well as budgeted spend.

Other impacts/results to date include:
Electricity saved since program began, 2,013,769 million kWh
Homes powered with energy saved, 64,074
Cars (equivalent) taken off the road with reduced emissions, 122,549
Benefits for each dollar spent, $2.58
Local jobs created plus other indirect, 50
Evergy Metro and Evergy West:
Eleven Programs
Program length (six years for Income-Eligible, Multi-Family), 3
Annual Investment, $32 Million
Anticipated savings for customers, $234 Million
Rebates available for residential and business customers, $41.7 Million
Investment in low-income programs, $10 Million

Cost to realize opportunity

32,000,000

Strategy to realize opportunity and explanation of cost calculation

The plan includes 11 MEEIA programs delivered over approximately 36 months beginning April 1, 2019 and ending March 31, 2022.

Consistent with the MEEIA rules, actual program costs will include the incremental cost of planning, developing, implementing, monitoring, and evaluating demand-side programs. All costs incurred by or on behalf of the collaborative process — including but not limited to costs for incremental consultants, employees, and administrative expenses — are included in the program costs. General administrative costs are included based on the estimated budget for each program.

Indirect costs associated with DSM programs — including but not limited to costs of a market potential study and advertising — are included in the program costs.

Programs are designated as Residential or Non-Residential and costs associated with each will be recovered by Residential or Non-Residential customers, respectively. Program costs associated with Non-Residential programs will be allocated to customer classes based on kWh from participation by customers from each respective class as determined by the rate code associated with the customers' account. Program costs associated with income-eligible programs will be allocated 50/50 between Residential and Non-Residential customers. The Non-Residential share of income-eligible program costs and costs of the Online Business Energy Audit program will be allocated based on the proportion of billed kWh sales from each customer class, net of opt-out.

Program costs associated with Business Demand Response will be allocated to all rate classes based on the proportion of billed kWh sales from each of those classes. This

allocation methodology addresses the inequity of opt-out customers' eligibility to participate in demand response and supports the concept that all customers benefit from the system demand reduction provided by participants in demand response.

The costs of the programs are recovered from customers through a rider mechanism.

Comment

C3. Business Strategy

C3.1

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

Row 1

Transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a transition plan within two years

Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future

Evergy participated in the Electric Power Research Institute's (EPRI) "Understanding Climate Scenarios and Goal Setting Activities" project that has developed a scientific foundation and guidance for climate scenarios and greenhouse gas goal setting. This has helped Evergy determine how to use these scenarios and evaluate the feasibility of climate models. As part of that project, EPRI published in 2018 "Grounding Decisions: A Scientific Foundation for Companies Considering Global Climate Change Scenarios and Greenhouse Gas Goals." EPRI found that the literature consistently held that emissions must peak and then decline to hold climate change to less than 3° C. Numerous assumptions are included in these 2° C models. Examples of these assumptions include cross-sector and global cooperation, significant deployment of negative emission technology, massive electrification efforts for equipment that otherwise uses petroleum-based resources, and natural gas electricity generation. Some of these models also assume significant use of newer nuclear technologies and assume that carbon dioxide production will peak in 2030. Being aware of these assumptions helps inform Evergy's climate risk analysis process as well as the development of carbon reduction goals. As previously indicated, Evergy has completed and filed its IRP and this analysis involved modeling various scenarios which provide a proxy for a Climate Scenario Analysis.

The scenario analysis results and details contained within Evergy's Task Force on Climate-related Disclosures (TCFD) report affirm that Evergy is aligned with reductions considered under the Paris Agreement to the United Nations Framework Convention on Climate Change, December 12, 2015. Scenarios will continue to be reviewed and

revised to keep pace with the most current and up-to-date research and science-based information and global targets.
Documents to support our strategy are found here:
https://www.evergy.com/-/media/documents/smart-energy/evergy-2021-irp-overview.pdf
https://investors.evergy.com/TCFD
https://investors.evergy.com/IRP2021
https://investors.evergy.com/IRP2022

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	1.6ºC – 2ºC	Evergy completes an IRP every three years that is subject to state regulatory commission approved rules in both Kansas and Missouri and includes robust scenario analysis. These analyses define Evergy's resource plan for the next 20 years. In addition to full triennial filings, Evergy also completes annual updates to these filings every year to incorporate changes in market conditions, among other factors. Climate scenarios are incorporated into this analysis using critical uncertain factors that are combined to create a variety of quantitative, economic scenarios for analysis. In Evergy's most recent IRP, 27 different scenarios were evaluated, which included variations in load growth, natural gas prices, and CO2 prices, among other inputs. This process has been described in-depth in Evergy's TCFD report. CO2 prices represent the most directly climate-related input into the IRP scenario analysis and, while specific assumptions are proprietary and confidential, this analysis includes a very large range of potential values for CO2. These CO2 price forecasts are currently driven by a composite of proprietary third-party forecasts generated by IHS, PIRA and JD Energy and

			CO2 prices generally increase beginning in approximately 2026. Ultimately, this scenario analysis informs the selection of Evergy's preferred resource plan including plant retirements and additions. Evergy's current preferred resource plan includes the addition of nearly 3,000 MW of renewable generation through 2030 and the retirement of more than 4,000 MW of fossil generation over the next 20 years. Additionally, Evergy has established carbon reduction goals of net-zero by 2045 and a 70% reduction in carbon emissions compared to 2005 levels through 2030, building on progress to-date of an approximate 46% reduction in CO2 emissions relative to 2005. These goals, and Evergy's IRP analysis, are informed by Electric Power Research Institute (EPRI) research and the Paris Climate Agreement and align with global CO2 pathways consistent with limiting warming to 2 Degrees Celsius. Please refer to 'Metrics and Targets" section of Evergy's TCFD report found here: https://investors.evergy.com/TCFD
Physical climate scenarios Bespoke physical scenario	Company-wide	1.6ºC – 2ºC	Evergy completes an IRP every three years that is subject to state regulatory commission-approved rules in both Kansas and Missouri and includes robust scenario analysis. These analyses define Evergy's preferred resource plan for the next 20 years. In addition to full triennial filings, Evergy also completes annual updates to these filings every year to incorporate changes in market conditions, among other factors. Climate scenarios are incorporated into this analysis using critical uncertain factors that are combined to create a variety of quantitative, economic scenarios for analysis. In Evergy's most recent IRP, 27 different scenarios were evaluated, which included variations in load growth, natural gas prices, and CO2 prices. This process has been described in-depth TCFD report. CO2 prices represent the most directly climate-related input into the IRP scenario analysis and, while specific assumptions are proprietary and confidential, this analysis includes a very large range of potential values for CO2. These CO2 price forecasts are currently driven by a composite of proprietary third-party forecasts generated by IHS, PIRA and JD Energy and generally have CO2 prices increasing beginning in approximately 2026. Ultimately, this scenario analysis informs the selection of Evergy's preferred resource plan – including plant retirements and additions.

			Evergy's current preferred resource plan includes the addition of nearly 3,000 MW of renewable generation through 2030 and the retirement of more than 4,000 MW of fossil generation over the next 20 years. Additionally, Evergy has established carbon reduction goals of net-zero by 2045 and a 70% reduction in carbon emissions compared to 2005 levels through 2030, building on progress to-date of an approximate 46% reduction in CO2 emissions relative to 2005. These goals, and Evergy's resource plan analysis, are informed by EPRI research and the Paris Climate Agreement and align with global CO2 pathways consistent with limiting warming to 2 Degrees Celsius. Please refer to 'Metrics and Targets" section of Evergy's TCFD report found here: https://investors.evergy.com/TCFD

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

How can Evergy transition its generation resources in order to manage climate risk while also minimizing risk-adjusted customer costs?

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

The IRP involves forecasting a variety of Evergy's key metrics out 15 to 20 years based on customers' needs.

The IRP includes a scenario planning process that tests potential resource plans and evaluates sensitivity to factors outside of Evergy's control. The objective is to minimize customer costs and ensure reliability on an expected value basis across all evaluated scenarios.

Evergy utilized three "critical uncertain factors" to develop scenarios for analysis: load growth, natural gas prices, and CO2 pricing. Each of these factors has a set of assumptions that are combined to create 27 distinct scenarios and assess the impact of the market and macroeconomic uncertainty and allow Evergy to test the sensitivity of its plans to specific climate-related risks.

Load Growth: The range between low, mid, and high load growth is modeled based on varying "typical" load growth drivers (population/economic growth) and assuming varying levels of electrification. The "high" load growth case assumes aggressive adoption of electrified technologies (e.g., vehicles, space, and water heating) by Evergy's customers. Evergy has evaluated a separate set of scenarios that forecast the

adoption of distributed energy resources (e.g., solar and storage). These scenarios represent a range of customer adoption of new technologies and also show the potential downstream effects of policy, which could drive increased commercialization and adoption of these technologies.
Natural Gas Prices: Evergy's current low natural gas price assumption aligns with the past five years of gas prices. Mid and high scenarios are based on external forecasts that are higher, particularly in the 2030 to 2040 window, than natural gas prices during the 2016-2020 period. In 2021 and the first six months of 2022, natural gas prices have risen to significantly higher levels relative to 2016-2020. The use of these three scenarios allows Evergy to test its plan's sensitivities to factors that could increase demand for natural gas (e.g., transition from coal to natural gas), or reduce supply of natural gas (e.g., reduced domestic oil production and/or increase export of natural gas from the US to overseas markets). Many of these potential drivers could ultimately be influenced by climate-related factors.
CO2 Pricing: Evergy uses CO2 pricing assumptions as the method of testing the sensitivity of a resource plan to climate-related factors. This approach can generally be seen as a proxy for potential impacts on carbon-emitting resources, but a price on CO2 is used because external forecasts are available for such pricing and because it creates a more "tangible" economic impact that can be evaluated through IRP modeling. These CO2 price forecasts are currently driven by a composite of proprietary forecasts generated by IHS, PIRA and JD Energy and increase in 2026.
Potential resource plans are evaluated across the scenarios to calculate Evergy's revenue requirement on an expected value basis.

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	Evergy's strategy for specific products and services is informed by climate-related risks. Evergy has implemented, and continues to offer, energy efficiency programs to help customers with their energy efficiency needs and to manage energy costs. Both Missouri and Kansas have passed legislation promoting the implementation of cost-effective demand-side management programs allowing for the recovery of these program costs from customers, along with the potential to earn performance incentives based upon certain criteria. In Missouri, Evergy currently offers energy efficiency programs for customers under the Missouri Energy Efficiency Investment Act (MEEIA). The current portfolio of

		programs was approved by the Missouri Public Service Commission (MPSC) in 2019 and provides for the recovery of program costs, throughput disincentive and the opportunity to earn a performance incentive based upon demand and energy savings achieved. The costs of the programs are recovered from customers through a rider mechanism. The current MEEIA programs as authorized by the MPSC expire at the end of 2023. Evergy requested Kansas Corporation Commission (KCC) authorization in December 2021 for energy efficiency programs for customers under the Kansas Energy Efficiency Investment Act (KEEIA); the review of this proposal is currently underway. The requested programs would provide for the recovery of program costs, throughput disincentive and the opportunity to earn a performance incentive based upon demand and energy savings achieved. The costs of the program would be recovered from customers through a rider mechanism. Proposed programs would be effective in 2023 and would expire in 2026. These programs help reduce GHG emissions, lower costs for consumers, and improve our relationship with our customers. In addition to Demand Side Management programs, Evergy offers tariffs, which allow customers to receive dedicated, 100% renewable service (Renewables Direct, RENEW, Solar Subscription Riders) from Evergy's renewable resources.
Supply chain and/or value chain	Yes	Evergy is a member of the Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA) which is a collaboration between utilities and suppliers to advance sustainable best practices in supply chain. EUISSCA has created an assessment for suppliers to disclose sustainability information, which includes a number of climate-specific items. In addition to disclosure, the assessment asks suppliers to indicate actions they are willing to take to improve sustainability. In 2020 and 2021, Evergy asked 58 suppliers to complete the assessment which represented 48% of Evergy's annual managed spend. Suppliers from our top two tiers were selected for the assessment. Tiers are determined by

		several factors, but primarily focus on suppliers with the highest spend totals and largest impacts on Evergy's core business areas. The survey tool has customized questions for over 23 supplier designations that ask a variety of questions, from the details of a supplier's operational controls to the level of leadership engagement and commitment to sustainability. It also offers benchmarking, which enables suppliers to make improvements based on best practices. We are using the results of the survey to help us further identify sustainability risks associated with our current suppliers and potential future business partners. While the assessment is voluntary, suppliers are incentivized to participate because the assessment offers industry-specific benchmarking information In return for participating, the supplier receives a free best-practice road map that they can use to improve operations and performance.
Investment in R&D	Yes	Evergy Ventures (a subsidiary) is a partner with Energy Impact Partners (EIP) and has a variety of direct investments in early-stage start-up companies in the energy space. Evergy Ventures activities allow Evergy to stay on the forefront of the development of the grid of the future and customer technology to enable the transition to a lower carbon future.
Operations	Yes	Evergy utilizes transmission and distribution equipment and construction standards that prepares our system to be resilient against future climate-related changes, whether temperature-driven or other changes in weather. Evergy has implemented asset management programs for its transmission and distribution systems to proactively test and replace components before failure due either to age or significant weather events. Transmission line project designers may deploy metal structures in grasslands and pastures that are prone to fire, which prevents damage to our infrastructure and surrounding property and increases the power grid reliability. Evergy also invests significant resources in managing the vegetation that surrounds its infrastructure. For transmission, Evergy plans to invest about $3 billion in transmission from 2022-2026, including investments focused on building a more physically resilient transmission system which supports the continued interconnection of

		renewables while also becoming more capable of withstanding extreme weather. A key part of Evergy's evolution is the transitioning of our generating fleet to rely less heavily on fossil fuels and as a result also less reliant on water. Evergy's current IRP includes the addition of nearly 3,000 MW of renewable generation through 2030 and the retirement of more than 4,000 MW of fossil generation over the next 20 years. Additionally, Evergy has established carbon reduction goals of net-zero by 2045 and a 70% reduction in carbon emissions compared to 2005 levels through 2030, building on progress to-date of an approximate 46% reduction in CO2 emissions relative to 2005. The IRP also identified the need for approximately 3,000 MW of new technologies which can provide non-emitting, dispatchable service to maintain reliability and manage climate change risk beyond 2035. Evergy also continues to focus on making its fossil fleet more efficient and flexible. This flexibility allows the fossil units to provide back-up support to renewable resources as they continue to be interconnected, while reducing carbon emissions caused by fossil operational constraints (min run times, economic minimums, etc.). Evergy plans to invest approximately $2 billion in renewable generation 2022-2026 and, through 2030, plans to invest in nearly 3,000 MW of renewable generation in total.

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	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Access to capital	Revenues: The vast majority of Evergy's revenues are based directly on its rate-regulated assets and assets under long-term contracts. In addition, through its MEEIA programs and investments that encourage energy efficiency, demand response, and electrification, Evergy's retail sales and ultimate revenues are impacted, based on the relevant recovery mechanism for those programs and investments. Evergy makes strategic decisions related to these revenue drivers with a goal of balancing both customer and shareholder risks, including climate-related risks. In addition, as Evergy continues to make decisions based on what is in the best interest of stakeholders, under the approved regulatory mechanisms in place, we expect to receive fair regulatory treatment

		regarding these items in the context of regulated ratemaking, which seeks to balance sustainability, reliability and affordability for customers. Direct costs: A specific example (case study) of incorporating physical climate-related risks into direct cost planning is related to vegetation management. We recognize there is a direct relationship between vegetation management and system reliability, particularly as physical climate-related risks continue to materialize. As a result, Evergy has integrated vegetation management strategies into its resiliency planning. Over the last several years, Evergy has sought to further automate and optimize its vegetation management program in a way that prioritizes activity, e.g., by seeking to mitigate the highest vegetation risks first, based on expected physical risk. This optimization approach enables reductions in direct costs while also mitigating impacts from physical climate risks. Indirect costs: Through its investment in EPRI, Evergy continues to increase its focus on, and knowledge of, climate-related risks and potential future mitigation of these risks. Capital Expenditures: In our efforts to reduce carbon emissions and execute our climate targets, Evergy plans to invest approximately $2 billion in renewable generation from 2022-2026, and over the next 10 years plans to invest in nearly 3,000 MW of renewable generation. In addition, Evergy plans to invest about $3 billion in transmission resiliency from 2022-2026 and about $3 billion in distribution over the same period. These capital investments all enable the transition of Evergy's operations while also providing reliability and resiliency to mitigate against physical climate risks and allow more robust delivery of clean energy from where it is produced to where it is consumed. Capital Allocation: A key driver of Evergy's capital allocation process is through development and approval of its IRP, which informs the level of investment in both renewable and traditional generation in Evergy's financial plan. As described in C3.2a, our IRP process utilizes key transition and physical risk considerations to inform our capital allocation strategy. As a result, Evergy's transition plan directly influences its financial planning and decision-making related to capital allocation. Access to capital: Evergy continues to provide more information to investors and other stakeholders that are interested in climate-related risks, e.g., through our Environmental, Social and Governance (ESG) and TCFD reporting. This information includes both Evergy's transition plan and its plan to mitigate climate-related risks.

		To tie our goal of lower carbon emissions to our financial performance and access to capital, in 2021, Evergy amended and restated its $2.5 billion master credit facility, with certain pricing based on diversity and non-emitting carbon generation goals. The applicable interest rates and commitment fees for the facility are subject to upward or downward adjustments, within certain limitations, if Evergy achieves, or fails to achieve, certain sustainability-linked targets based on two key performance indicator metrics: (i) Non-Emitting Generation Capacity and (ii) Diverse Supplier Spend (both as defined in the facility).

C4. Targets and performance

C4.1

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

Absolute target

C4.1a

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

Target reference number

Abs 1

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2 accounting method

Scope 3 category(ies)

Base year

2005

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

48,455,198

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

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

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

48,455,198

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

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

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

100

Target year

2030

Targeted reduction from base year (%)

70

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

14,536,559.4

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

26,540,373

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

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)

26,540,373

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

64.6099781847

Target status in reporting year

Underway

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

Target ambition

Please explain target coverage and identify any exclusions

Scope 1 carbon emissions are included in this target

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

Evergy's plan for achieving its Scope 1 target is outlined in its publicly IRP. The primary relative highlights from the IRP are summarized below:
IRP Goals:
• Energy solutions that result in the most cost effective and lowest risk option for our customers
• Builds on our own strong generation transition track record. Since 2005, we cut our carbon emissions by about 50 percent. Over that same period, we added more than 4,400 megawatts of renewable generation (including both owned generation resources and renewable energy sourced through long-term power purchase agreements) and retired more than 2,400 megawatts of fossil generation. Evergy is providing more than half of retail customers' energy needs through emission-free sources.
• Reduces carbon emissions by 70% through 2030 (relative to 2005 levels). Building on this trajectory, our goal is to achieve net zero carbon emissions by 2045, assuming key technology, policy, and regulatory enablers are in place.

Evergy's current Preferred Resource Plan includes the addition of nearly 3,000 MW of renewable generation through 2030 and the retirement of more than 4,000 MW of fossil generation over the next 20 years.
This will be accomplished by:
Continued responsible transition of existing fossil generation from baseload to reliable, flexible back-up capacity, lowering operating costs and carbon emissions.
Retirement of nearly all remaining coal generation in the next 20 years, with nearly 3,000 MWs of renewables by 2030 as well as approximately 2,400 MW of zero-carbon emitting firm, dispatchable resources added after 2035. Technology advancements will offer the ability to optimize timing and provide the potential to further accelerate Evergy's generation transition.
The IRP also addresses the growing reality of increased insurance, financing, and other costs to customers if Evergy doesn't timely complete the transition of its generation portfolio.

Progress to date:
In 2021, Carbon emissions have been reduced 46% since 2005 baseline and we continue to aim for steady progress to meet the 70% reduction goal by 2030 and net zero by 2045.

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
2007

Target coverage
Company-wide

Target type: energy carrier
Electricity

Target type: activity
Production

Target type: energy source
Renewable energy source(s) only

Base year
2007

Consumption or production of selected energy carrier in base year (MWh)
611,020

% share of low-carbon or renewable energy in base year
1

Target year
2021

% share of low-carbon or renewable energy in target year
31

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

31

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

100

Target status in reporting year

Achieved

Is this target part of an emissions target?

Is this target part of an overarching initiative?

Other, please specify

Renewable Energy Standard – Missouri Renewable Electricity Standard

Please explain target coverage and identify any exclusions

Missouri Renewable Electricity Standard.
Established: 2007.
Requirement: 14.7% of net Retail Sales by 2021 (IOUs).
Applicable Sectors: Investor-owned utility.
Details: Solar-Electric: 0.3% of net Retail Sales by 2021 (IOUs).
Enabling Statute, Code or Order: Mo. Rev. Stat. §393.1020 et seq.

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

List the actions which contributed most to achieving this target

Through its ongoing planning processes – including the IRP process, Evergy has added 4,403 MW of renewable generation over the last 15 years.

Target reference number

Low 2

Year target was set

2009

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Base year

2009

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

546,597

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

2.7

Target year

2020

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

20

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

31

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

163.5838150289

Target status in reporting year

Achieved

Is this target part of an emissions target?

Is this target part of an overarching initiative?

Other, please specify

Renewable Energy Standard – Kansas Renewable Electricity Standard

Please explain target coverage and identify any exclusions

Kansas Renewable Energy Standard Act (RESA) goal established: 2009.
In 2015 RESA became voluntary.
Requirement: 15% of net Retail Peak by 2016-2019; 20% of net Retail Peak by 2020.
Applicable Sectors: Investor-owned utility.
Enabling Statute, Code or Order: Kan Stat. Ann. §66-1256 et seq.; Voluntary goal: Senate Bill 91.

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

List the actions which contributed most to achieving this target

Through its ongoing planning processes – including the IRP process, Evergy has added 4,403 MW of renewable generation over the last 15 years.

Target reference number

Low 3

Year target was set

2021

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Base year

2021

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

4,398

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

26

Target year

2030

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

46

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

26

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

0

Target status in reporting year

Underway

Is this target part of an emissions target?

Evergy's plan for achieving its Scope 1 target is outlined in its IRP. Highlights from the IRP are summarized below:
IRP Goals:
• Energy solutions that result in the most cost effective and lowest risk option for our customers
• Builds on our own strong generation transition track record. Since 2005, we cut our carbon emissions by about 50 percent. Over that same period, we added more than 4,400 megawatts of renewable generation (including both owned generation resources and renewable energy sourced through long-term power purchase agreements) and retired more than 2,400 megawatts of fossil generation. Evergy is providing more than half its retail customers' energy needs through emission-free sources.
• Reduces carbon emissions by 70% through 2030 (relative to 2005 levels). Building on this trajectory, our goal is to achieve net zero carbon emissions by 2045, assuming key technology, policy, and regulatory enablers are in place.

Is this target part of an overarching initiative?

Other, please specify

Evergy's triennial IIRP

Please explain target coverage and identify any exclusions

Our generation transition plan was developed with a focus on reliability, affordability, and sustainability. It is important to Evergy to have solid environmental stewardship practices, while at the same time managing costs and reducing reliability risks to our customers.

Our generation transition plan will also drive economic development through job opportunities that can be created. Many employment sectors comprise the green job industry, such as green building and construction trades, renewable energy generation, green infrastructure, civil engineers, and technical trades.

This capacity goal is measured in installed MW capacity, not generated/produced MW Hours.

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

Through 2030, Evergy plans to add nearly 3,000 MWs of renewable generation, an increase over its last IRP update, based on a new all-source request for proposal (RFP) and comprehensive analysis of the costs and risks associated with available generation sources. Evergy plans for these renewable additions to be a combination of solar and wind resources. Solar offers clean energy that more closely aligns with our customers' load demand, with peak generation available around the same time of day when load needs are highest. Given low levels of solar generation in the Evergy system and our region, it adds a new fuel source to our existing portfolio at meaningful levels, increasing diversity and advancing our progress towards our target. Wind additions continue to take advantage of the wind resource we have in our region. These additions of solar and wind allow Evergy to continue taking advantage of federal tax credits and increasing affordability for our customers.

Adding renewable generation over time will enable us to benefit from the sustained and ongoing technology and cost improvements for both solar and wind. In addition to reducing our environmental impact and adding new cost effective resources, renewable resource investments help mitigate the exposure to potential cost increases for customers that would result from additional environmental compliance standards for fossil plants, carbon pricing, or other future changes in governmental or regulatory policy.

By 2030, our Plan includes the addition of nearly 3,000 MW of renewables followed by approximately 2,400 MW of zero-carbon firm, dispatchable resources after 2035 to further advance the transition of our generation fleet through 2040. These firm, dispatchable resources are currently modeled as natural gas-fired combustion turbines to provide valid financial and operational parameters for calculating revenue requirements. Because they will only be needed for reliability purposes in the last five years of the planning horizon (2036-2040), the assumption is that new carbon-free generation and/or suitable long-duration energy storage technology will be available to provide capacity by that time period. We expect a continued robust pace of technology

change, including improvements to storage capabilities, and will identify resources to meet this need through future IRP filings as they near our implementation planning horizon.
By year end 2021 we had a total capacity of renewable resources of 4,398 MW.

List the actions which contributed most to achieving this target

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
2019

Figure or percentage in base year
1

Target year
2030

Figure or percentage in target year
35

Figure or percentage in reporting year
13

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

35.2941176471

Target status in reporting year

Underway

Is this target part of an emissions target?

No.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

Evergy's goal is that 100% of new light-duty vehicle purchases by 2030 will be electric. In addition, Evergy has a goal that a minimum of 35% of our overall vehicle fleet including light-duty, medium-duty, heavy-duty, forklifts, and small utility vehicles be electrified by 2030.

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

13% total fleet electrification as of YE 2021.

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.

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

Abs1

Target year for achieving net zero

2045

Is this a science-based target?

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

Please explain target coverage and identify any exclusions

Evergy's Net Zero target is focused on Scope 1 emissions.

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

Yes

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

Evergy is currently evaluating nature-based neutralization options that could include, but would not necessarily be limited to, restoring and monitoring native landscapes (grasses, forested areas) with a goal to provide additional carbon sequestration benefits.

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

To meet our carbon reduction targets, Evergy will continue to build on the significant progress in emissions reductions that has been achieved as a result of wind generation additions and fossil retirements, enabling a reduction in carbon emissions of nearly 50% relative to 2005 levels. To support the achievement of the net zero objective, the industry needs to explore innovative technologies and processes to not only generate carbon-free electricity but also to capture and sequester carbon when possible. Evergy, in partnership with the Kansas Geological Survey (KGS) and Linde, Inc., was awarded a project by the DOE to support their Office of Fossil Energy's goal to advance energy storage solutions toward commercial deployment. The overall aim of this project was to conduct a feasibility study for a power-to-hydrogen system "inside the fence" of a fossil fuel electricity generating unit in Kansas.

Two Evergy generating sites, Hutchinson Energy Center and Gordon Evans Energy Center, were evaluated as part of this project. Both sites were being considered due to potential underground salt cavern hydrogen storage capacity. However, neither site was selected for further evaluation. The feasibility phase of this project set the stage for future potential site-specific projects integrating relatively mature combinations of energy storage technologies with specific fossil fuel assets.

This project is a continuation of the strong working relationship between Evergy, KGS and Linde, Inc. This was the second DOE-funded project the team has been awarded. The team worked together on several phases of the DOE funded Carbon Storage Assurance Facility Enterprise (CarbonSAFE) project, which focused on developing geological storage sites for storage of 50 million metric tons or greater of carbon dioxide captured from industrial source emissions in Kansas. For the CarbonSAFE project, the team conducted a pre-feasibility analysis at Evergy's Jeffrey Energy Center. Both projects expand our knowledge regarding potential pathways to reduce our carbon dioxide emissions and overall carbon footprint.

Additionally, nature-based sequestration techniques are being evaluated.

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*	2	14,843,450
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 production processes

Other, please specify

Evergy Energy Efficiency Programs

Estimated annual CO2e savings (metric tonnes CO2e)

353,600

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)

32,000,000

Payback period

No payback

Estimated lifetime of the initiative

11-15 years

Comment

Evergy has been investing in demand-side management (DSM) programs – specifically, energy efficiency and demand response – for over ten years and continues to work to expand these programs through the filing of DSM programs under the Kansas Energy Efficiency Investment Act (KEEIA). Evergy also offers tariffs which allow customers to receive dedicated, 100% renewable energy (renewables direct, solar and wind subscription services) from Evergy's renewable resources. These programs 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.
Annual CO2e savings are calculated using Evergy's specific annual carbon intensity.
Evergy's MEEIA Cycle 3 programs in Missouri are anticipated to result in $234 million and 769 million kWh of energy savings (net present value of energy savings for customers over the life of the equipment, at current rates).
For energy efficiency measures, the capital investment is dependent upon the measure(s) that were installed and vary on a project-by-project basis. Costs get recovered via rates, but Evergy invests $32 million annually.
Lifespan is dependent upon the measure(s) installed and the estimated useful life. Average lifetime of devices installed is approximately 11 years.

Initiative category & Initiative type

Low-carbon energy generation

Other, please specify

Carbon-Free Generation: Wind, Solar, Hydro

Estimated annual CO2e savings (metric tonnes CO2e)

14,489,850

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)

1,958,000,000

Payback period

No payback

Estimated lifetime of the initiative

>30 years

Comment

Evergy began executing renewable energy procurement in 2021 to support the new renewable generation targeted for addition over the next three years.
Annual CO2e savings are calculated using Evergy's specific annual carbon intensity and represents MW hours for which Evergy retained Renewable Energy Credits as of 12/31/2021
Evergy's 2021 10K CAPEX disclosure for 2022-2026 includes approx. $2.0 billion of new renewable CAPEX out of a planned $10.7 billion of total CAPEX for the company over this period.
New planned wind investments are $1.2 billion of the planned renewable CAPEX. The planned $1.2 billion investment in wind projects targets 800 MW of new installed wind capacity. Evergy is evaluating investing additional capital associated with the potential repowering of existing wind sites; these potential opportunities are not included in the $1.2 billion planned investment.
New planned solar investments are $0.8 billion of the planned renewable CAPEX from 2022-2026. The planned $0.8 billion of investment in new solar projects targets 540 MW of new installed solar capacity to add to Evergy's renewable portfolio and support the retirement of 487 MW of coal capacity.
Evergy's renewable additions are evaluated through the IRP process and focused on minimizing customer costs. This results in an integrated plan including plant retirements, supply-side resource additions, and demand-side resource additions. No payback period is calculated for the renewable additions specifically.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	The long-established Missouri Renewable Energy Standard and Kansas Renewable Energy Standard initially provided incentive for Evergy to undertake renewable energy additions. That, coupled with an aging fossil fleet, resulted in Evergy adding renewable facilities to comply with this standard. As of year-end 2021, this included total renewable capacity and total renewable net generation. Evergy completes an IRP every three years which are subject to state regulatory commission-approved rules in both Kansas and Missouri and which include robust scenario analysis. These analyses define Evergy's resource plan for the next 20 years. In addition to full triennial filings, Evergy also completes annual updates to these filings every year to incorporate changes in market conditions, among other factors. Climate scenarios are incorporated into this analysis using critical uncertain factors which are combined to create a variety of quantitative, economic scenarios for analysis. In Evergy's most recent IRP, 27 different scenarios were evaluated which included variations in load growth, natural gas prices, and CO2 prices. This process has been described in-depth in Evergy's Task Force on Climate-Related

	Financial Disclosures (TCFD) report. CO2 prices represent the most directly climate-related input into the IRP scenario analysis and, while specific assumptions are proprietary and confidential, this analysis includes a very large range of potential values for CO2. Ultimately, this scenario analysis informs the selection of Evergy's preferred resource plan – including plant retirements and additions. Evergy's current preferred resource plan includes the addition of nearly 3,000 MW of renewable generation through 2030 and the retirement of more than 4,000 MW of fossil generation over the next 20 years. Additionally, Evergy has established carbon reduction goals of net-zero by 2045 and a 70% reduction in carbon emissions compared to 2005 levels through 2030, building on progress to-date of an approximate 46% reduction in CO2 emissions relative to 2005.
Dedicated budget for energy efficiency	Evergy has been investing in DSM programs – specifically, energy efficiency and demand response – for more than ten years. In Missouri, Evergy offers a portfolio of programs to provide customers (residential and business) with opportunities to invest in energy efficiency to drive long-term energy savings with a faster payback on the investment. Evergy also incentivizes customers to help Evergy manage our peak system demand with business demand response programs and residential thermostat incentives. Evergy received an extension of our MEEIA Cycle 3 programs for an additional year, which extends the programs through the end of 2023. This extension includes increased low-income program budgets and year-round demand response programs. In 2021, Evergy filed a similar four-year energy efficiency portfolio in Kansas and expects a ruling on that filing later in 2022. Evergy provides residential customers the opportunity to download their energy information in the Green Button format. The Green Button initiative is an industry-led effort that responds to a 2012 White House call-to-action to provide utility customers with easy and secure access to their energy usage information in a consumer-friendly and computer-friendly format for electricity, natural gas, and water usage.
Internal price on carbon	Climate scenarios are incorporated into Evergy's IRP analysis through the use of critical uncertain factors which are combined to create a variety of quantitative, economic scenarios for analysis. In Evergy's most recent IRP, 27 different scenarios were evaluated which included variations in load growth, natural gas prices, and CO2 prices. This process has been described in-depth in Evergy's TCFD report. CO2 prices represent the most directly climate-related input into the IRP scenario analysis and, while specific assumptions are proprietary and confidential, this analysis includes a very large range of potential values for CO2. Ultimately, this scenario analysis informs the selection

	of Evergy's preferred resource plan – including plant retirements and additions.

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

Low-Carbon Investment (LCI) Registry Taxonomy

Type of product(s) or service(s)

Other

Other, please specify

Solar PV

Description of product(s) or service(s)

Evergy's Solar Subscription programs provide customers with renewable energy solutions through a local community-based initiative without the hassle of installing and maintaining solar. Evergy offers Solar Subscription in Missouri and Kansas.

The Global Investor Coalition on Climate Change Low Carbon Investment (LCI) Registry Taxonomy clearly identifies both Wind and Solar Energy investments as included categories.

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

Evergy has performed an internal evaluation that indicates a CO2 reduction of 2,000 pounds for every renewable MWh generated. This value aligns with the 2021 AVoid Emissions and geneRation Tool (AVERT) emissions factors provided by the USEPA.

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

Use stage

Functional unit used

CO2 Metric Tons

Reference product/service or baseline scenario used

Evergy has performed an internal evaluation that shows that coal production has been directly offset by renewable additions. Results indicate that coal generation, on average, produces 2,000 pounds of CO2 for every MWh generated. Renewable generation on the other hand produces zero pounds of CO2 for every MWh generated.

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

12,445

Explain your calculation of avoided emissions, including any assumptions

Evergy has performed an internal evaluation that shows that coal production has been directly offset by renewable additions. Results indicate that this provides a CO2 reduction of 2,000 pounds for every renewable MWh generated.

This value closely aligns with the 2021 AVERT emissions factors provided by the USEPA.

Revenues associated with this program are not publicly disclosed.

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

Low-Carbon Investment (LCI) Registry Taxonomy

Type of product(s) or service(s)

Other

Other, please specify

Wind Power

Description of product(s) or service(s)

Evergy's subscription-based wind program provides customers with a wind-powered renewable energy solution. This program allows customers to offset up to 100 percent of their electric usage from local renewable energy resources.

The Global Investor Coalition on Climate Change Low Carbon Investment (LCI) Registry

Taxonomy clearly identifies both Wind and Solar Energy investments as included categories.

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

Evergy has performed an internal evaluation that indicates a CO2 reduction of 2,000 pounds for every renewable MWh generated. This value aligns with the 2021 AVoid Emissions and geneRation Tool (AVERT) emissions factors provided by the USEPA.

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

Use stage

Functional unit used

CO2 Metric Tons

Reference product/service or baseline scenario used

Evergy has performed an internal evaluation that shows that coal production has been directly offset by renewable additions. Results indicate that coal generation, on average, produces 2,000 pounds of CO2 for every MWh generated. Renewable generation on the other hand produces zero pounds of CO2 for every MWh generated.

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

12,475

Explain your calculation of avoided emissions, including any assumptions

Evergy has performed an internal evaluation that shows that coal production has been directly offset by renewable additions. Results indicate that this provides a CO2 reduction of 2,000 pounds for every renewable MWh generated.

This value closely aligns with the 2021 AVERT emissions factors provided by the USEPA.

Revenues associated with this program are not publicly disclosed

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

Low-Carbon Investment (LCI) Registry Taxonomy

Type of product(s) or service(s)

Other

Other, please specify

Wind Power

Description of product(s) or service(s)

Evergy's green tariff program, Renewables Direct, offers large commercial and industrial customers a turn-key solution to obtain wind energy.

The Global Investor Coalition on Climate Change Low Carbon Investment (LCI) Registry Taxonomy clearly identifies both Wind and Solar Energy investments as included categories.

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

Evergy has performed an internal evaluation that indicates a CO2 reduction of 2,000 pounds for every renewable MWh generated. This value aligns with the 2021 AVoid Emissions and geneRation Tool (AVERT) emissions factors provided by the USEPA.

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

Use stage

Functional unit used

CO2 Metric Tons

Reference product/service or baseline scenario used

Evergy has performed an internal evaluation that shows that coal production has been directly offset by renewable additions. Results indicate that coal generation, on average, produces 2,000 pounds of CO2 for every MWh generated. Renewable generation on the other hand produces zero pounds of CO2 for every MWh generated.

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

3,136,872

Explain your calculation of avoided emissions, including any assumptions

Evergy has performed an internal evaluation that shows that coal production has been directly offset by renewable additions. Results indicate that this provides a CO2 reduction of 2,000 pounds for every renewable MWh generated.

This value closely aligns with the 2021 AVERT emissions factors provided by the USEPA.

Revenues associated with this program are not publicly disclosed

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.

Evergy beneficially uses methane at our Rolling Meadows PPA site and our owned/operated St. Joe, MO Landfill generation Site. Evergy also works with suppliers that are members of **Our Nation's Energy Future** (ONE Future). ONE Future is a coalition of natural gas companies working together to voluntarily reduce methane emissions across the natural gas supply chain, with a goal to lower emissions to 1% by 2025.

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?
Row 1	No

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)

48,455,198

Comment

Includes Power Generation as well as auxiliary equipment emissions

Scope 2 (location-based)

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

2,103

Comment

Scope 2 (Location-Based) is being reported for facilities not served by Evergy. Emissions were calculated using actual kWh purchases (when available) and national average CO2 emissions factor derived from electric sector emissions and generation data.

Scope 2 (market-based)

Base year start

January 1, 2021

Base year end

December 31, 2021

Base year emissions (metric tons CO2e)

2,307

Comment

Scope 2 (Market Based) is being reported for facilities not served by Evergy. Emissions were calculated using actual kWh purchases (when available) and utility specific CO2 emissions factor derived from supplier emissions and generation data.

Scope 3 category 1: Purchased goods and services

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 6: Business travel

Base year start
January 1, 2021

Base year end
December 31, 2021

Base year emissions (metric tons CO2e)
434

Comment

Scope 3 category 7: Employee commuting

Base year start
January 1, 2021

Base year end
December 31, 2021

Base year emissions (metric tons CO2e)
7,338

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

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

The Climate Registry: Electric Power Sector (EPS) Protocol
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Mandatory Greenhouse Gas Reporting Rule

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

26,540,373

Comment

The Scope 1 emissions reported include CO2e emissions from power generation as well as auxiliary equipment, vehicle fleet, facilities comfort heat, HVAC refrigerant losses, and fugitive emissions from transmission and distribution.

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

Scope 2 (market-based). These emissions were calculated using actual kWh purchases (when available) and supplier specific emission factors when available, or from national average CO2 emissions factors derived from electric sector emissions and generation data when supplier specific data is not available.

Scope 2 (location—based). These emissions were calculated using actual kWh purchases (when available) and national average CO2 emissions factors derived from electric sector emissions and generation data.

C6.3

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

Reporting year

Scope 2, location-based

2,138

Scope 2, market-based (if applicable)

2,334

Comment

C6.4

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

Yes

C6.4a

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

Source

Scope 1 emissions identified by The Climate Registry as “de minimis” for electric power sector

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

No emissions excluded

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

No emissions excluded

Explain why this source is excluded

These items were identified by The Climate Registry as de minimis for the applicable sector and are not considered material to the current GHG inventory

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

1

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

Per The Climate Registry General Reporting Protocol (TCR GRP) and Electric Power Sector Protocol, there are a number of de-minimis sources for the electric utility industry that are not included in our Scope 1 inventory. Evergy has determined that the assumptions and recommendations of the TCR GRP and Electric Power Sector Protocol are applicable in Evergy’s case. The value estimated is less than a fraction of one percent of the total Scope 1 inventory.

Source

HVAC equipment with a charge less than 50lbs

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

No emissions excluded

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

No emissions excluded

Explain why this source is excluded

As a utility provider, most of our emissions are reported within our Scope 1 for generation. The exclusion of refrigerant emissions is not considered material to the current GHG inventory.

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

1

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

Emissions were estimated based on units greater than 50-pound charge and found to be de minimis accounting to less than a fraction of one percent of our overall scope 1 emissions. These are not considered material to the current GHG inventory. Evergy will re-access the materiality of these emission once we reach our emission reduction goals.

Source

Emergency equipment (Fire pumps and Electric generators)

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

No emissions excluded

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

No emissions excluded

Explain why this source is excluded

As a utility provider, most of our emissions are reported within our Scope 1 for generation. The exclusion of refrigerant emissions is not considered material to the current GHG inventory.

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

1

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

Emissions were estimated using maximum hours allowed for emergency engines under EPA 40 CFR part 60 and 63 and Evergy's estimations and were found to be immaterial.

These items account for less than a fraction of one percent of our overall Scope 1 emissions.

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

Not relevant, explanation provided

Please explain

As an electric utility, the majority of our emissions are reported within our Scope 1 and Scope 2 emissions. A majority of our expenditures are for fuel to generate electricity and are reported under Category 3 Fuel-and-energy-related activities. Evergy has determined that Scope 3 emissions from purchased goods and services is are not considered significant towards our GHG inventory.

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

As an electric utility, the majority of our emissions are reported within our Scope 1 and Scope 2 emissions. A majority of our expenditures are for fuel to generate electricity and are reported under Category 3 Fuel-and-energy-related activities. Evergy has determined that Scope 3 emissions from purchased goods and services are not considered significant towards our GHG inventory.

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

Evaluation status

Not relevant, explanation provided

Please explain

As an Electric utility, the majority of our emissions are reported within our Scope 1 emissions. This does not meet Evergy's threshold for emissions that are of material concern to investors.

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

As an Electric utility, the majority of our emissions are reported within our Scope 1 emissions. This does not meet Evergy's threshold for emissions that are of material concern to investors.

Waste generated in operations

Evaluation status

Not relevant, explanation provided

Please explain

As an Electric utility, the majority of our emissions are reported within our Scope 1 emissions. We believe that the best way to deliver environmental value by minimizing our waste footprint begins with reducing the amount of waste we generate in the first place and then looking for opportunities to reuse and recycle materials so that we minimize the waste that we must send to local landfills. Emissions from landfill waste are estimated to not significantly contribute to our total emissions. This does not meet Evergy's threshold for emissions that are of material concern to investors.

Business travel

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

434

Emissions calculation methodology

Distance-based method

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

100

Please explain

As an Electric utility, the majority of our emissions are reported within our Scope 1 and Scope 2 emissions. Scope 3 emissions from business travel are not considered significant towards our GHG inventory. Scope 3 emissions reported are from business air travel (provided by Evergy's travel software DEEMs), employee personal vehicle mileage, and rental car mileage (from procurement records). These emissions were calculated using factors from EPA's emission factor hub.

Employee commuting

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

7,338

Emissions calculation methodology

Distance-based method

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

0

Please explain

As an electric utility, the majority of our emissions are reported within our Scope 1 and Scope 2 emissions. After calculating employee commuting totals, Evergy determined that Scope 3 emissions from employee commuting are not considered significant towards our GHG inventory.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Evergy has no upstream leased assets.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

The emissions associated with line losses due to transportation and distribution have been reported within our Scope 1 emissions, which cover power generation and production and delivery.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Our product (electricity) does not require further processing.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Emissions related to generation of electricity (the sold product) are included within Scope 1 emissions. Electricity is simply consumed, thus Evergy has determined this category is not relevant.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

End of life treatment of sold products is not applicable to our “product.” Evergy has determined that since electricity is simply consumed this category is not relevant.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

We have not identified any further downstream leased assets that have not been included with our scope 1 emissions.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Evergy has no franchises.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

Emissions from investment assets that are material have been reported with Scope 1 and Scope 2 emissions.

Other (upstream)

Evaluation status

Please explain

Other (downstream)

Evaluation status

Please explain

C6.7

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

Yes

C6.7a

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

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	6,911	Includes the use of landfill gas at generators from St. Joseph landfill. These renewable energy resources convert methane to CO2 while generating useable power. Methane has GHG equivalency of 28 times CO2. This renewable resource reduces our carbon footprint.

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

0.515

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

26,542,707

Metric denominator

megawatt hour generated (MWh)

Metric denominator: Unit total

51,525,292

Scope 2 figure used

Market-based

% change from previous year

4

Direction of change

Increased

Reason for change

The increase in emissions is related to an increase in energy demand and subsequent production from Evergy's fossil fueled assets as several extreme weather events impacted Evergy's service territory and the Southwest Power Pool (SPP) region as a whole. Relative to 2005 emissions levels, carbon emissions in 2021 were roughly 46% lower.

Additionally, using 2020 as our emissions base year provided what we consider a non-representative baseline given the reduced energy demand in 2020 resulting from the COVID-19 pandemic, i.e., shifting customer demand.

The COVID-19 pandemic has altered electricity usage patterns, including an overall reduction in demand and shifting usage away from customers with relatively higher load requirements, such as industrial and commercial customers, toward customers with relatively lower load requirements, such as residential customers.

Intensity figure

0.00475

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

26,542,707

Metric denominator

unit total revenue

Metric denominator: Unit total

5,586,700,000

Scope 2 figure used

Market-based

% change from previous year

0

Direction of change

No change

Reason for change

We did not report Scope 2 data in 2020

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	26,411,023	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	7,923	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	114,883	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	297	IPCC Fifth Assessment Report (AR5 – 100 year)
SF6	6,247	IPCC Fifth Assessment Report (AR5 – 100 year)

C-EU7.1b

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

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives			0.27	6,247	N/A
Combustion (Electric utilities)	26,072,715	1,145.3	0	26,260,086	N/A
Combustion (Gas utilities)	0	0	0	0	Evergy, Inc. is not a gas utility
Combustion (Other)	266,192	3.72	0	273,742	Emissions from comfort heat, fleet vehicle miles, and Lake Road
Emissions not elsewhere classified					N/A

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	26,540,373

C7.3

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

By business division
By facility
By activity

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Evergy Missouri West	2,402,075
Evergy Metro	10,252,362
Evergy Kansas Central	13,885,936

C7.3b

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

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Greenwood	47,271	38.8615	-94.2982
Nevada	2,809	37.51	-94.22
Northeast	31,685	39.1231	-94.5605
Ralph Green	9,116	38.7865	-94.2768

South Harper	47,460	38.6803	-94.4824
St. Joe Landfill	6,911	39.4	-94.46
Iatan	5,547,591	39.4472	-94.98
Hawthorn	2,665,530	39.1306	-94.4778

Lake Road	254,475	39.7246	-94.8773
Emporia	214,561	38.4464	-96.0651
Gordon Evans	94,672	37.7903	-97.5217
Hutchinson	47,237	38.0906	-97.8747
Spring Creek	42,945	35.7422	-97.655

Osawatomie	23,467	38.5325	-94.9042
West Gardner	37,677	38.7878	-94.985
Jeffrey	8,759,787	39.2825	-96.1153
Lawrence	1,901,070	39.0072	-95.2692

LaCygne	6,405,320	38.3472	-94.6389
Wolf Creek	1,837	38.2389	-95.6903
Cross Roads	58,842	34.183	-90.5621
Stateline	314,261	37.0659	-94.614

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Generation	26,518,712
Transmission and Distribution	21,661

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	26,540,373	

C7.9

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

Increased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	1,769,234	Decreased	13.8	Evergy has performed an internal evaluation that shows that coal production has been directly offset by renewable additions. Results indicate that this provides avoided CO2 emissions of 2,000 pounds for every renewable MWh generated. In 2020, Evergy produced 14,079,846 MWh of renewable energy. In 2021, Evergy produced 16,030,093 MWh of renewable energy. This year-over-year increase in renewable energy was 1,950,247 MWh. Using the logic above,

				this additional 1,950,247 MWh of renewable energy resulted in 1,769,234 metric tons of CO2 avoided emissions.
Other emissions reduction activities				
Divestment				
Acquisitions				
Mergers				
Change in output	2,588,673	Increased	10	The increase in emissions is related to an increase in energy demand and subsequent production from Evegy's fossil fueled assets as several extreme weather events impacted Evergy's service territory and the SPP region as a whole. Additionally, using 2020 as our emissions base year provided what we consider a non-representative baseline given the reduced energy demand in 2020 resulting from the COVID pandemic, i.e., shifting customer demand. Relative to 2005 emissions levels, carbon emissions in 2021 were 46% lower. The COVID-19 pandemic has altered electricity usage patterns, including an overall reduction in demand and shifting usage away from customers with relatively higher load requirements, such as industrial and commercial customers, toward customers with relatively lower load requirements, such as residential customers.
Change in methodology				
Change in boundary				
Change in physical operating conditions				

Unidentified				
Other				

C7.9b

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

Market-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)	16,030,093	35,495,199	51,525,292
Consumption of purchased or acquired electricity			4,946	4,946
Consumption of self-generated non-fuel renewable energy		493		493
Total energy consumption		16,030,586	35,500,145	51,530,731

C8.2b

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

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
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

HHV

Total fuel MWh consumed by the organization

57,768

MWh fuel consumed for self-generation of electricity

11,088

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

Comment

Values only include Evergy's owned assets and units under a Power Purchase Agreement.

Other biomass

Heating value

HHV

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

MWh fuel consumed for self-generation of steam

0

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

HHV

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

MWh fuel consumed for self-generation of steam

0

Comment

Coal

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

27,971,795

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

310,590

Comment

Steam produced at Lake Road facility is being reported as a ratio of fuel burned.

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

168,890

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

7,540

Comment

Steam produced at Lake Road facility is being reported as a ratio of fuel burned.

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

2,075,030

MWh fuel consumed for self-generation of heat

42,965

MWh fuel consumed for self-generation of steam

473,907

Comment

Steam produced at Lake Road facility is being reported as a ratio of fuel burned.

Values only include Evergy's owned assets and units under a Power Purchase Agreement.

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

Heating value

HHV

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

MWh fuel consumed for self-generation of steam

0

Comment

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

57,768

MWh fuel consumed for self-generation of electricity

30,226,804

MWh fuel consumed for self-generation of heat

42,965

MWh fuel consumed for self-generation of steam

792,037

Comment

C-EU8.2d

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

Coal – hard

Nameplate capacity (MW)

6,235

Gross electricity generation (GWh)

27,971.8

Net electricity generation (GWh)

25,423.3

Absolute scope 1 emissions (metric tons CO2e)

25,279,298

Scope 1 emissions intensity (metric tons CO2e per GWh)

994.3

Comment

Lignite

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Oil

Nameplate capacity (MW)

683

Gross electricity generation (GWh)

168.89

Net electricity generation (GWh)

151.4

Absolute scope 1 emissions (metric tons CO2e)

92,314.3

Scope 1 emissions intensity (metric tons CO2e per GWh)

609.7

Comment

Gas to Oil ratio calculated using EIA Gas and Oil breakdowns

Gas

Nameplate capacity (MW)

4,145

Gross electricity generation (GWh)

2,075

Net electricity generation (GWh)

1,860.2

Absolute scope 1 emissions (metric tons CO2e)

1,134,195

Scope 1 emissions intensity (metric tons CO2e per GWh)

609.7

Comment

Gas to Oil ratio calculated using EIA Gas and Oil breakdowns

Sustainable biomass

Nameplate capacity (MW)

8

Gross electricity generation (GWh)

57.77

Net electricity generation (GWh)

57.77

Absolute scope 1 emissions (metric tons CO2e)

6,911

Scope 1 emissions intensity (metric tons CO2e per GWh)

119.6

Comment

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

Waste (non-biomass)

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Nuclear

Nameplate capacity (MW)

1,219

Gross electricity generation (GWh)

8,320.17

Net electricity generation (GWh)

8,060.25

Absolute scope 1 emissions (metric tons CO2e)

1,837

Scope 1 emissions intensity (metric tons CO2e per GWh)

0.23

Comment

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

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

Hydropower

Nameplate capacity (MW)

60

Gross electricity generation (GWh)

208.52

Net electricity generation (GWh)

208.52

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Wind

Nameplate capacity (MW)

4,326

Gross electricity generation (GWh)

15,757.12

Net electricity generation (GWh)

15,757.12

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Solar

Nameplate capacity (MW)

4

Gross electricity generation (GWh)

6.69

Net electricity generation (GWh)

6.69

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

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

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

Other non-renewable

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Total

Nameplate capacity (MW)
16,680

Gross electricity generation (GWh)
54,565.96

Net electricity generation (GWh)
51,525.3

Absolute scope 1 emissions (metric tons CO2e)
26,514,555

Scope 1 emissions intensity (metric tons CO2e per GWh)
514.6

Comment

C8.2g

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

Country/area
United States of America

Consumption of electricity (MWh)
5,439

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

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

5,439

C-EU8.4

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

C-EU8.4a

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

Country/Region
United States of America

Voltage level
Transmission (high voltage)

Annual load (GWh)
51,525

Annual energy losses (% of annual load)

Scope where emissions from energy losses are accounted for
Scope 1

Emissions from energy losses (metric tons CO2e)

Length of network (km)
16,415.3

Number of connections
1,640,800

Area covered (km2)
120,725.43

Comment
GWh cited is Evergy's Net Generation that is delivered via our T&D grid. Evergy does not publicly disclose a system-wide line loss factor. T&D line losses are below the threshold of materiality.

Number of connections includes a total of residential, commercial, and industrial customers.

Country/Region
United States of America

Voltage level
Distribution (low voltage)

Annual load (GWh)
51,525

Annual energy losses (% of annual load)

Scope where emissions from energy losses are accounted for

Scope 1

Emissions from energy losses (metric tons CO2e)

Length of network (km)

97,204.4

Number of connections

1,640,800

Area covered (km2)

120,725.43

Comment

GWh cited is Evergy's Net Generation that is delivered via our T&D grid. Evergy does not publicly disclose a system-wide line loss factor. T&D line losses are below the threshold of materiality.

Number of connections includes a total of residential, commercial, and industrial customers.

C9. Additional metrics

C9.1

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

Description

Land use

Metric value

20,000

Metric numerator

Acres

Metric denominator (intensity metric only)

% change from previous year

0

Direction of change

No change

Please explain

Evergy has been a member of the Rights-of-Way as Habitat Working Group since 2018. This group represents more than 200 organizations across private industry, government agencies, non-profit organizations, and academia in the United States and Canada. Their purpose is to collaborate and identify best management practices for habitat conservation on working landscapes, specifically our power line rights-of-ways.

Evergy was also an early supporter of the monarch butterfly Candidate Conservation Agreement with Assurances (CCAA). This CCAA is a formal agreement between the U.S. Fish and Wildlife Service and non-federal property owners, like Evergy, to voluntarily commit to enhance, restore or maintain habitat to benefit the monarch butterfly with the goal that listing this species as endangered or threatened will become unnecessary. By enrolling in this CCAA, Evergy has committed to conserving over 20,000 acres of monarch butterfly habitat on our rights-of-ways and company-owned lands throughout Kansas and Missouri.

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

5.2

Explain your CAPEX calculations, including any assumptions

Evergy's 2021 10K CAPEX disclosure for planned 2022-2026 CAPEX includes $556 million of CAPEX to maintain existing coal generation facilities, which represents 41% of the $1.4 billion of CAPEX planned to be invested in non-renewable utility scale generation.

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

We have no CAPEX associated with lignite.

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

0

Explain your CAPEX calculations, including any assumptions

This metric included with gas.

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

1

Explain your CAPEX calculations, including any assumptions

Evergy's 2021 10K CAPEX disclosure for planned 2022-2026 CAPEX includes $106 million of CAPEX to maintain existing natural gas generation facilities, which represents 8% of the $1.4 billion of CAPEX planned to be invested in non-renewable utility scale generation.

Sustainable biomass

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

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

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

0

Explain your CAPEX calculations, including any assumptions

Other biomass

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

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

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

0

Explain your CAPEX calculations, including any assumptions

Waste (non-biomass)

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

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

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

0

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

5.8

Explain your CAPEX calculations, including any assumptions

Evergy's 2021 10K CAPEX disclosure for planned 2022-2026 CAPEX includes $618 million of CAPEX to purchase nuclear fuel and maintain Evergy's 94% share of the Wolf Creek Nuclear Power Plant. The planned $618 million of CAPEX represents 46% of the $1.4 billion of CAPEX planned to be invested in non-renewable utility scale generation.

Geothermal

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

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

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

0

Explain your CAPEX calculations, including any assumptions

Hydropower

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

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

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

0

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

11.6

Explain your CAPEX calculations, including any assumptions

Evergy's 2021 10K CAPEX disclosure for planned 2022-2026 CAPEX includes nearly $2 billion of new renewable CAPEX out of a planned $10.7 billion. Planned wind investments make up $1.2 billion of the planned renewable CAPEX.

Evergy currently has over 4,300 MW of installed wind capacity. The planned $1.2 billion investment in new wind projects target the addition of 800 MW of installed wind capacity, consistent with Evergy's most recent update to the Integrated Resource Plan (IRP) and disclosed in the company's September 2021 Investor Day Presentation. In addition, Evergy is evaluating investing additional capital by repowering existing wind sites; these potential opportunities are is not included in the $1.2 billion planned investment.

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

7.2

Explain your CAPEX calculations, including any assumptions

Evergy's 2021 10K CAPEX disclosure for planned 2022-2026 CAPEX includes nearly $2 billion of new renewable capex out of a planned $10.7 billion of CAPEX. New planned solar investments are $0.8 billion of the planned renewable CAPEX.

The planned $0.8 billion investment in new solar projects target the addition of 540 MW of installed solar capacity to Evergy's renewable portfolio and help to enable the retirement of 487 MW of coal capacity, consistent with the Company's most recent update to the IRP and disclosed in the company's September 2021 Investor Day Presentation.

Marine

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

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

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

0

Explain your CAPEX calculations, including any assumptions

Fossil-fuel plants fitted with CCS

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

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

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

0

Explain your CAPEX calculations, including any assumptions

Other renewable (e.g. renewable hydrogen)

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

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

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

0.5

Explain your CAPEX calculations, including any assumptions

Within Evergy's 2021 10K CAPEX disclosure, there is $55 million of non-regulated smaller scale solar to be developed and sold to co-ops and municipalities through direct sales or purchased power agreements.

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

0.1

Explain your CAPEX calculations, including any assumptions

Evergy's 2021 10K CAPEX disclosure for planned 2022-2026 CAPEX includes $14 million of CAPEX to purchase fleetwide equipment and tools, which represents 1% of the $1.4 billion of CAPEX planned to be invested in non-renewable utility scale generation.

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
Charging networks	EV charging network and charging stations.	18,200,000	0.2	2026
Lighting	Replace street lighting and PAL lighting.	51,800,000	0.5	2026
Smart grid	Complete roll-out of AMI meters, meters for new customers, and meter replacements for existing customers.	132,700,000	1.2	2026
Other, please specify Small Scale	Small Scale Storage Project	400,000	0	2026

Storage Project				

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	

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

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

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Carbon capture and storage/utilisation	Basic academic/theoretical research		0	To help to enable meeting our net zero carbon reduction target, the nation needs to explore innovative technologies and processes to not only generate carbon-free electricity but also to capture and sequester carbon when possible. The Department of Energy (DOE) awarded a grant project to Evergy, and our partners, the Kansas Geological Survey (KGS) and Linde, Inc. The project is aimed at supporting the DOE Office of Fossil Energy's goal to advance energy storage solutions toward commercial deployment. The overall aim of this project was to conduct a feasibility study

				for a power-to-hydrogen system “inside the fence” of a fossil fuel electricity generating unit in Kansas. Two Evergy generating sites, Hutchinson Energy Center and Gordon Evans Energy Center, were evaluated as part of this project. Both sites were considered for their potential underground salt cavern hydrogen storage capacity. However, neither site was selected for further evaluation. The feasibility phase of this project set the stage for future potential site-specific projects, integrating relatively mature combinations of energy storage technologies with specific fossil fuel assets. The project described above is a continuation of the strong working relationship between Evergy, KGS and Linde, Inc. This was the second DOE-funded project the team has been awarded. The team worked together on several phases of the DOE funded Carbon Storage Assurance Facility Enterprise (CarbonSAFE) project, which focused on developing geological storage sites for storage of 50 million metric tons or greater of carbon dioxide captured from industrial source emissions in Kansas. For the CarbonSAFE project, the

				team conducted a pre-feasibility analysis at Evergy's Jeffrey Energy Center. Both projects expand our knowledge regarding potential pathways to reduce our carbon dioxide emissions and overall carbon footprint.
Carbon capture and storage/utilisation	Applied research and development	≤20%	25,000	Evergy's nuclear power plant, Wolf Creek Nuclear Generating Station, contracts for water stored in John Redmond Reservoir (JRR) to use during drought. The JRR Watershed is situated in the Flint Hills landscape, a key biodiversity area. This biodiversity hotspot is threatened by sedimentation loss and the watershed has lost nearly half its water storage capacity due to sedimentation. To reduce sedimentation and protect this valuable freshwater resource, the state of Kansas adopted a goal to treat 80% of the priority cropland above JRR with Soil Health Principles. In 2021, Evergy, together with United States Fish and Wildlife Service, Kansas Alliance for Wetlands and Streams (KAWS), Kansas Department of Wildlife and Parks, Kansas Department of Health and Environment, Ducks Unlimited, National Wild Turkey Federation, and Neosho Valley Quail Forever, developed a new KAWS position designated,

				in part, to facilitate implementation of the new Kansas state goal. An added focus of the new KAWS position is wildlife habitat improvement in JRR watershed. Evergy's investment helped to purchase equipment used to conduct a range of agriculture practices including seeding cover crops and native grass on cropland, and connecting large areas of Flint Hills prairie through necessary tree removals. The KAWS position functions without cost to the private landowners. In the fall of 2021, with Evergy's support, KAWS planted 114 acres of cropland back to native prairie and treated over 3,000 acres (almost 5 square miles) of cropland with cover crops. Cover crops keep the ground covered, a soil health principle, between cash crops. These practices resulted in an annual load reduction to JRR of 3,266 tons of sediment, 8,365lbs of nitrogen, and 4,439lbs of phosphorus. In addition, annual carbon sequestration was estimated at 2,744 tons.

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

Y

2021 Scope 1, 2, 3 Data Verification.pdf

Page/ section reference

Page 2, Table 1

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 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

Y

2021 Scope 1, 2, 3 Data Verification.pdf

Page/ section reference

Pg.2, Table 1

Relevant standard

ISO14064-3

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: Business travel

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Y

2021 Scope 1, 2, 3 Data Verification.pdf

Page/section reference

Page 2, Table 1

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Employee commuting

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Y

2021 Scope 1, 2, 3 Data Verification.pdf

Page/section reference

Page 2, Table 1

Relevant standard

ISO14064-3

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, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

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

Objective for implementing an internal carbon price

Navigate GHG regulations
Stakeholder expectations
Stress test investments

GHG Scope

Scope 1

Application

Evergy utilizes a carbon price as part of scenario analysis which informs the Integrated Resource Plan (IRP) and decision-making for current and future generating plants

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

Variance of price(s) used

Evergy's carbon price is applied through the IRP process

Type of internal carbon price

Shadow price

Impact & implication

Evergy's carbon prices drives assumptions around Southwest Power Pool market prices and fuel costs for Evergy's fossil units.

Evergy completes an IRP every three years that is subject to state regulatory commission-approved rules in both Kansas and Missouri and includes robust scenario analysis. These analyses define Evergy's resource plan for the next 20 years. In addition to full triennial filings, Evergy also completes annual updates to these filings every year to incorporate changes in market conditions, among other factors. Climate scenarios are incorporated into this analysis through the use of critical uncertain factors that are combined to create a variety of quantitative, economic scenarios for analysis. In

Evergy's most recent IRP, 27 different scenarios were evaluated, which included variations in load growth, natural gas prices, and CO2 prices. This process has been described in-depth in Evergy's Task Force for Climate-Related Financial Disclosures (TCFD) report.

CO2 prices represent the most climate-related direct input into the IRP scenario analysis and, while specific assumptions are proprietary and confidential, this analysis includes a large range of potential values for CO2. These CO2 price forecasts derived from a composite of proprietary third-party forecasts generated by IHS, PIRA and JD Energy and generally show increased CO2 prices beginning in approximately 2026.

As a result of this process, CO2 prices are a key input into the economics of various resource plans in the IRP and ultimately informed the selection of Evergy's preferred resource plan.

C12. Engagement

C12.1

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

Yes, our suppliers
Yes, our customers/clients
Yes, other partners in the value chain

C12.1a

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

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

2

% total procurement spend (direct and indirect)

48

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

0

Rationale for the coverage of your engagement

Evergy is a member of the Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA) which is a collaboration between utilities and suppliers to advance

sustainable best practices in supply chain. EUISSCA administers an annual supplier assessment.

In 2020 and 2021, Evergy asked 58 suppliers to complete the assessment. The selected suppliers represented 48% of Evergy's annual managed spend. Suppliers from our top two tiers were selected for the assessment. These tiers are designated by several factors, but primarily determined by suppliers with the highest spend totals and largest impacts on Evergy's core business areas.

The survey tool has customized questions for over 23 supplier types that ask a variety of questions, from the details of a supplier's operational controls to the level of leadership engagement and commitment. It also offers benchmarking and can be used for sharing best practices.

We are using the results of the survey to help us further identify sustainability risks associated with our current suppliers and potential future business partners.

While the assessment is voluntary, suppliers are incentivized to participate because the assessment offers industry-specific benchmarking information

In return for participating, the supplier receives a free best-practice road map that they can use to improve operations and performance.

Impact of engagement, including measures of success

EUISSCA has created an assessment for suppliers to disclose sustainability information, which includes several climate-specific items. In addition to disclosure, the assessment asks suppliers to indicate actions they are willing to implement for sustainability improvement.

Evergy's EUISSCA, supplier survey results for 2021 are as follows: Evergy selected 58 suppliers to complete the survey. The 58 suppliers are Evergy's Tier 1 and Tier 2 suppliers. The tiers are based on Evergy's managed spend and criticality of the supplier to Evergy's business.

Of the suppliers invited to participate, 25 completed the survey which met the 40 percent internal Supply Chain threshold goal. Those that did not choose to participate, have been contacted to reiterate Evergy's expectation that they participate in future surveys

The survey, which is tailored to different categories of suppliers, focuses on an initial assessment of sustainability performance and programs, with benchmarking and other tools provided to aid in the identification and implementation of performance improvement opportunities.

This effort helps Evergy's Supply Chain work collaboratively with its suppliers to advance sustainability performance in the most relevant areas for each type of supplier

for the services or materials they are providing to Evergy.

Evergy is currently reviewing and evaluating the results. Evergy's intent is to use the survey results as baseline data to start engaging with suppliers and push for improved supplier sustainability performance.

Comment

C12.1b

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

Type of engagement & Details of engagement

Education/information sharing
Share information about your products and relevant certification schemes (i.e. Energy STAR)

% 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

Evergy recognizes that as an electric utility, our ability to mitigate climate change and move forward our net-zero carbon goal is dependent on internal and external stakeholders, including customers.

Evergy routinely interacts with customers via bill inserts, social media, and outreach events to educate customers about our low carbon energy offerings, programs, and company sustainability initiatives. Evergy believes that directly engaging with consumers and emphasizing the cost savings and environmental benefits of our products, that we can steer positive change along our value chain.

Impact of engagement, including measures of success

Evergy set a goal of reaching 100% enrollment for our residential solar and wind subscription programs as well as Evergy's Renewables Direct program.

Enrollment is tracked for each program, and 100% enrollment is reached when all built renewable generating capacity has been committed to participating customers for each respective program (wind subscription, solar subscription, renewables direct). These programs serve our residential, commercial, and industrial customers. This portfolio of renewable energy programs helps drive down the emissions associated with power consumption in our service area.

To date, these distributed energy resource programs are 100% subscribed and we maintain a waiting list for enrollment, far surpassing our internal goals for these programs. Evergy intends to measure continued success of this program by expanding renewable resources to accommodate the waitlist and to continue to target high energy use customers (those with the highest brown power utility bills) for enrollment into these programs.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Evergy is committed to empowering a better future for our customers and communities. Making a positive impact in the communities we call home is a foundational component of our business. We partner with many community organizations to move sustainability and a lower carbon environment forward. Below are a few examples:
1) Partnering with Bridging the Gap and National Arbor Foundation to distribute young trees and information about how to plant them around homes to provide energy savings for years to come. Additionally, Evergy's Green Team partners with these organizations to provide and plant young trees and native vegetation in communities throughout its service territory.
2) Supporting the Kansas City, Missouri benchmarking ordinance by providing building owners with multiple tenants the ability to aggregate information and gain an Energy Star score as the first step to identifying energy savings opportunities for large buildings.
3) Providing financial and technical support to local transit authorities as they take initial steps towards electrifying their bus fleets.
Along with several other regional utilities, Evergy has signed a memorandum of cooperation to promote the construction of the Midwest multi-state coordinated foundational electric vehicle charging network. The objective is to foster public confidence and provide convenient, fast-charging resources for EVs traveling long distances throughout the Midwest.
4) Climate Action Kansas City's Regional Building Energy Exchange (BE-Ex) will serve as a "one-stop-shop" to fast-track implementation of known innovative solutions and emerging trends for the built environment. Climate Action Kansas City (CAKC) is a compact of elected officials and community leaders that works throughout the Kansas City region to reduce or mitigate greenhouse gases and improve climate resilience. The BE-Ex brings world class resources, direct assistance, and tangible value to the current and future owners and occupants of Kansas City buildings. This program aims to provide direct support and financing services to building owners, policy makers, property managers, architects, engineers, and others in the Kansas City metropolitan region to promote a high performance-built environment to help the Kansas City region meet its ambitious climate goals, create jobs, accelerate innovation, and grow its economy. Evergy has provided a grant to support this program and is actively engaged with CAKC in the strategic planning stage of this initiative.
5) Since 1989, our volunteer, employee-driven Green Team has completed thousands of projects including; restoring hundreds of acres of wetlands, thousands of acres of prairie, and planting more than 30,000 trees. The Green Team partners with agencies, non-profits, and

schools, to protect, preserve, and educate. With the help of Evergy's sponsorship and the Green Team's volunteer work, native organization MO Hives KC was able to advance their mission to educate and involve urban residents in the creation, preservation, and expansion of pollinator habitats in the Kansas City metro area, utilizing vacant land to support community health and wellness. In 2020, Evergy helped MO Hives KC establish a community garden and urban apiary (bee farm) in the metro KC area. Community gardens are vital for food production, particularly in urban areas where "food deserts" (areas that are under-served by traditional and economical grocers) are common. By creating a healthy urban apiary modal, that can be duplicated elsewhere, our partnership has helped MO Hives inspire communities, provide experiential learning opportunities, amplify community garden yields, increase bee populations, and beautify previously blighted property.
6) To achieve our net-zero goal, we recognize that research and development of new and existing low or zero-emissions technologies are needed. We partnered with the Kansas Geological Survey to conduct a feasibility study related to hydrogen storage. The study, which was partially funded by the U.S. Department of Energy (DOE), focused on the storage of hydrogen for use as a clean-burning fuel in a combustion turbine. We also started work with a third-party to explore the carbon capture and sequestration feasibility at a fossil fuel power plant in our service territory. Both technologies have the potential to greatly reduce or eliminate carbon emissions at fossil fuel power plants in the future.

C12.2

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

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

C12.3

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

Row 1

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

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

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

Yes

Attach commitment or position statement(s)

Evergy participates in discussions within the legislative and regulatory frameworks with the goal of supporting policies that enable a cost-effective transition to cleaner energy

sources and that create beneficial tools for our customers. Active engagement with both the Kansas and Missouri legislatures and the state public service commissions in both Missouri and Kansas to support constructive compromises that lead to attractive solutions and favorable regulatory outcomes that support Evergy's and our customers' sustainability goals.

TCFD report can be found here: https://investors.evergy.com/TCFD

We are committed to being a leader in vehicle electrification and have worked to enact supportive legislative and regulatory outcomes that move electrification in Missouri and Kansas forward.

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

Through an Integrated Resource Plan (IRP) process that included stakeholder input, Evergy completed an analysis of future resource needs and scenarios to support the company's transition toward a lower carbon future, advancing goals of sustainability, affordability, and reliability. This plan was reviewed and approved by the Board of Directors (Board) and the results are the foundation of our climate change strategy. The results are used to align operational and financial decisions and engagement and communication with stakeholders.

To ensure strategy alignment and execution, the company has an engaged Board. The Board has responsibility to direct, oversee, and monitor the performance of management, who are charged with conducting the day-to-day business of the Company.

The Board fulfills their responsibilities consistent with their fiduciary duties, and in compliance with all applicable laws and regulations. Directors may take into consideration the interests of other stakeholders, including customers, employees, and community members. The Board oversees that the assets and operations of the Company are managed and safeguarded.

Evergy has a Board committee – the Nuclear, Power Supply and Environmental Committee – that has a focus on environmental matters and risks related to power supply resources, including those related to climate. This committee monitors environmental policy and planning issues, including those with respect to local, state, and federal air, water, electric, environmental, and waste matters; reviews any environmental reports prepared; and is involved with shareholder engagement on environmental matters. For a full description of Evergy's governance structure relating to environmental matters, please refer to C1/Governance.

Evergy's senior leadership team meets weekly; the frequency of meetings ensures alignment across the organization as we execute our sustainability strategy.

To help ensure consistent messaging across our sustainability engagement activities, Evergy has established a management structure to oversee and drive ESG matters, including messaging and reporting.

In 2021 for performance years 2022-2024 we added an environmental metric to the Long-term Incentive Plan, based on total megawatts of owned renewables additions by year-end 2024 or buy-ins of purchase power agreements. This metric is to incent our

achievement of renewable additions and progress towards our sustainability strategy as supported by our IRP process.

C12.3a

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

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

Other, please specify

Sustainable Finance

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

Bill drafted and introduced to Kansas Senate as SB 245.

In April 2021, the state of Kansas passed the Utility Financing and Securitization Act (UFSA) which allows certain public utilities, including Evergy Kansas Central and Evergy Metro, to securitize utility assets in order to recover energy transition costs relating to the early retirement of certain generating assets.

To recover the energy transition costs through securitization as allowed in the UFSA, a public utility must obtain a predetermination order from the KCC finding that the retirement of the subject generation facility is reasonable. Upon the receipt of a successful predetermination order, the public utility must then file an application with the KCC for a financing order to issue securitized bonds to recover the energy transition costs. The UFSA also allows the pursuit of securitization to help finance qualified extraordinary expenses, such as fuel costs incurred during extreme weather events.

Policy, law, or regulation geographic coverage

Regional

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

United States of America

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

Support with minor exceptions

Description of engagement with policy makers

Evergy actively engages in the legislative and regulatory processes to move climate initiatives forward. This includes working with policy makers on house and senate bills.

Evergy's regulatory group is responsible for pursuing supportive regulatory outcomes, through established and longstanding Kansas and Missouri regulatory processes.

As we pursue legislative and regulatory initiatives, we focus on our core strategic objectives of affordability, reliability, and sustainability.

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

Some stakeholders have advocated for limiting the use of proceeds from securitization to renewable energy projects. Evergy's capital expenditure program covers a broad range of beneficial investments for customers, ranging from grid modernization and reliability and resiliency investments in the transmission and distribution system, to new customer programs and significant additions to the company's renewable generation resources. Evergy has advocated for flexibility in the deployment of securitization proceeds across its capital expenditure program.

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

Yes, we have evaluated, and it is aligned

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

Other, please specify

Sustainable finance

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

HB 734 - Securitization

Policy, law, or regulation geographic coverage

Regional

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

United States of America

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

Support with minor exceptions

Description of engagement with policy makers

Evergy actively engages in the legislative and regulatory processes to move climate initiatives forward. This includes working with policy makers on house and senate bills.

Evergy's regulatory group is responsible for pursuing supportive regulatory outcomes, through established and longstanding Kansas and Missouri regulatory processes.

As we pursue legislative and regulatory initiatives, we focus on our core strategic objectives of affordability, reliability, and affordability.

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

Some stakeholders have advocated for limiting the use of proceeds from securitization to renewable energy projects. Evergy's capital expenditure program covers a broad range of beneficial investments for customers, ranging from grid modernization and reliability and resiliency investments in the transmission and distribution system, to new

customer programs and significant additions to the company's renewable generation resources. Evergy has advocated for flexibility in the deployment of securitization proceeds across its capital expenditure program.

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

Yes, we have evaluated, and it is aligned

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

Adaptation and/or resilience to climate change

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

Application put before the Public Service Commission of the State of Missouri, impacting Evergy Missouri Metro and Evergy Missouri West for an order related to the approval of a transportation electrification portfolio. By this application, filed February 24, 2021, Evergy Missouri Metro and Evergy Missouri West seek an order from the Commission allowing the company to implement tariffs that authorize and enable a Transportation Electrification pilot program.

Policy, law, or regulation geographic coverage

Regional

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

United States of America

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

Support with no exceptions

Description of engagement with policy makers

This Transportation Electrification portfolio presents a wide range of benefits, including lower costs as well as a variety of local economic benefits. Additionally, climate-related benefits include greater grid flexibility and reduced emissions associated with transportation electrification.

Evergy actively engages in the legislative and regulatory processes to move climate initiatives forward. This includes working with policy makers on house and senate bills.

Evergy's regulatory group is responsible for pursuing supportive regulatory outcomes, through established and longstanding Kansas and Missouri regulatory processes.

As we pursue legislative and regulatory initiatives, we focus on our core strategic objectives of affordability, reliability, and affordability.

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

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

Yes, we have evaluated, and it is aligned

C12.3b

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

Trade association

Edison Electric Institute (EII)

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

Consistent

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

We publicly promote their current position

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

Evergy employees serve on multiple EEI committees and in leadership positions on these committees.
EEI is the association that represents all U.S. investor-owned electric companies.
EEI provides public policy leadership, strategic business intelligence, and essential conferences and forums.
EEI's member companies are leading a clean energy transformation. We are united in our commitment to get the energy we provide as clean as we can as fast as we can, without compromising on the reliability or affordability that are essential to the customers and communities we serve.
EEI's member companies are committed to continuing to reduce carbon emissions in our sector and to helping other sectors, particularly the transportation and industrial sectors—transition to clean, efficient electric energy.
One example of a policy position Evergy supports and has been instrumental in moving forward: In December 2021, EEI launched the National Electric Highway Coalition (NEHC), a collaboration among electric companies, including Evergy, that are committed to providing EV fast charging stations allowing the public to drive EVs with confidence along major U.S. travel corridors by the end of 2023. The NEHC is the largest such alliance of electric companies that have organized around the goal of deploying EV fast charging infrastructure to support the growing number of EVs and ensure that the transition to EVs is seamless for drivers.
The Evergy Clean Charge Network consists of over 1,000 electric vehicle charging stations in Kansas City – one of the largest of any city in the United States.
Evergy filed 5-year program plans of $12.8 million in Missouri and $19.7 million in

Kansas to help customers with costs related to purchasing an EV or electrifying their fleets. The program filing includes several aspects focused on education, rebate programs, clean charge network expansion to underserved areas, and time of use tariffs.
Evergy has a policy in place to minimize engine idling in company vehicles in the Kansas City and Wichita metropolitan areas. Annual mandatory training on this policy was implemented for all Evergy employees in 2021. To further reduce vehicle emissions, Evergy's goal is that 100 percent of new light-duty vehicle purchases by 2030 will be electric. In addition, Evergy has a goal that 35 percent or more of our overall vehicle fleet including light-duty, medium-duty, heavy-duty, forklifts, and small utility vehicles be electrified by 2030.

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

Describe the aim of your organization's funding

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

Yes, we have evaluated, and it is aligned

C12.3c

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

Type of organization

Non-Governmental Organization (NGO) or charitable organization

State the organization to which you provided funding

Mid-America Regional Council - Kansas City Building Energy Exchange

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

50,000

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

Established in early 2021 as the first major initiative of Kansas City's Regional Climate Action Plan, the BE-Ex brings world class resources, direct assistance, and tangible value to the current and future owners and occupants of Kansas City buildings. This program aims to provide direct support and financing services to building owners, policy makers, property managers, architects, engineers, and others in the Kansas City metropolitan region to promote a high performance-built environment and help the

Kansas City region meet ambitious climate goals, create jobs, accelerate innovation, and grow its economy. Evergy provided a $150,000 grant to support this program, with an estimated annual dispersal of $50,000 and is actively engaged with an Evergy employee sitting on the Board of BE-Ex.

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

Yes, we have evaluated, and it is aligned

Type of organization

Non-Governmental Organization (NGO) or charitable organization

State the organization to which you provided funding

Climate Action Kansas City

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

5,000

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

Evergy has supported “Climate Action KC” for several years. Climate Action KC is a nonprofit regional collaborative bringing elected officials and community leaders together to reduce emissions, invigorate the economy, promote public health and improve the quality of life across the Kansas City region. Evergy supports this organization by sponsoring annual events and provides support by engaging as members of the Climate Action KC stakeholder group.

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, incorporating the TCFD recommendations

Status

Complete

Attach the document

Y

Evergy TCFD Report.pdf

Page/Section reference

Page 4, 28, 29, 30, 31, 32

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Evergy provides quantitative and qualitative information on various ESG areas of focus, including those relating to climate change, GHG emissions, waste, and water on the Investor Relations website and in publicly available, non-financial reports. There has been a proliferation in recent years of alternative formats for reporting on ESG topics, and Evergy has been a leader in interacting with its constituents to decide which of these frameworks are most important and relevant to stakeholders. Our non-financial disclosures (Sustainability Report, TCFD report, etc.) outline the broad-reaching benefits of Evergy's ESG focus.

Publication

In voluntary sustainability report

Status

Complete

Attach the document

Y

Evergy Sustainability Report.pdf

Evergy ESG Metrics.pdf

Page/Section reference

Sustainability Report Pages 4, 5, 6, 8, 9, 10, 21, 26, 45, 46
EEI/ESG Template - data is on page 1

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Evergy provides quantitative and qualitative information on various ESG areas of focus, including those relating to climate change, GHG emissions, waste, and water on the investor relations website and in publicly available, non-financial reports. There has been a proliferation in recent years of alternative formats for reporting on ESG topics, and Evergy has been a leader in interacting with its constituents to decide which of these frameworks are most important and relevant to stakeholders. Our non-financial disclosures (Sustainability Report, TCFD report, etc.) outline the broad-reaching benefits of Evergy's ESG focus.

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, both board-level oversight and executive management-level responsibility	The Nuclear, Power Supply, and Environmental Committee of the Board of Directors (Board) assists the Board in overseeing environmental matters, safety, and physical and cybersecurity related to power supply resources. The Committee's role is one of review, observation, and oversight and does not alter management's responsibility and accountability for the development, assessment, and implementation of objectives, policies, processes, programs, and procedures necessary to ensure safe and reliable nuclear operations, utility operations, and compliance with laws and regulations including environmental laws and regulations. Environmental oversight duties: Review environmental policy and planning issues, including with respect to local, state, and federal air, water, electric, environmental, and waste matters. Review any significant environmental reports that have been prepared by Company management and distributed to the public. Review the Company's strategy, and related risks, with respect to greenhouse gas and other air emissions, water use, and toxic emissions and waste.

		The Safety and Power Delivery Committee of the Board reviews the Company's strategy with respect to transmission and distribution assets and compliance with laws, regulations, and standards relating to the ownership and operation of transmission and distribution assets. This includes activities related to vegetation management.

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	Commitment to No Net Loss Commitment to avoidance of negative impacts on threatened and protected species	Other, please specify Monarch Candidate Conservation Agreement with Assurances (CCAA) Avian Protection Program

C15.3

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

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

C15.4

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

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

C15.5

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

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No, we do not use indicators, but plan to within the next two years	

C15.6

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

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Impacts on biodiversity	2021 Sustainability Report - Pages 18, 19, 20 [1]

[1] Evergy Sustainability Report.pdf

C16. Signoff

C-FI

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

N/A

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	Chief Executive Officer (CEO)	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

N/A

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

N/A

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

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