Welcome to your CDP Climate Change Questionnaire 2021

C0. Introduction

C0.1

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

Headquartered in Allentown, Pennsylvania, PPL Corporation (NYSE: PPL) and our family of companies provide essential energy services to more than 2.5 million customers. We provide an outstanding service experience for our customers, consistently ranking among the best utilities in the U.S.

PPL is one of the largest regulated utility companies in the United States, and we understand the electricity and natural gas we provide is vital to our customers and communities. As the energy grid evolves, so do we. Our companies are using technology to connect distributed energy resources (DERs), including renewable generation, to our energy grid. We are developing solar for our customers across the U.S., and we are also taking steps to reduce our environmental footprint and advance a cleaner, more balanced energy mix.

We are a positive force in the cities and towns where we do business, and the spirit of volunteerism and philanthropy runs deep at PPL. Our more than 5,600 employees generously volunteer their time and energy to help others. We also partner with hundreds of nonprofit organizations and provide financial support to help develop a strong, skilled workforce, revitalize our communities and enhance education.

PPL is committed to providing essential energy in extraordinary ways, and we deliver.

Covering more than 19,000 square miles, PPL Corporation’s regulated utilities provide electricity and natural gas to power our customer’s lives.

Our Structure
PPL Corporation is the parent company to three regulated utility companies. Through our regulated utility subsidiaries, we deliver electricity to approximately 1.4 million customers in eastern and central Pennsylvania and 1 million customers in Kentucky and Virginia. We also deliver natural gas to approximately 300,000 customers and operate more than 7,500 megawatts of generation in Kentucky. In addition, PPL is the parent company to Safari Energy, LLC, a leading provider of solar power solutions for commercial customers in the U.S.

In June 2021, PPL closed on the sale of its U.K. business, Western Power Distribution. Historical data and our performance against enterprise-level goals that were active in the 2020 reporting year includes data from this business segment. This report is otherwise focused on our existing U.S. operations.

PPL is in the process of seeking regulatory approval to acquire the Narragansett Electric Company in Rhode Island, a state with aggressive decarbonization goals. Data from those operations will be included in future reports once that acquisition closes.

How We Do Business

We Excel in Customer Satisfaction
Delivering electricity and natural gas safely and reliably is our number one priority. PPL's businesses are among the very best in customer satisfaction. PPL Electric Utilities Corporation (PPL Electric), Louisville Gas and Electric Company (LG&E), and Kentucky Utilities Company (KU) have repeatedly been recognized among the top of their class for customer satisfaction with a combined 54 J.D. Power Awards.

We're Building a Smarter, More Secure Energy Grid to Advance our Clean Energy Strategy and Power the Future
PPL is driven daily by a determination to ensure that each of our customers has the power they count on every day. Fulfilling that commitment takes dedication, hard work and resources. As the energy grid undergoes rapid transformation to accommodate clean energy, PPL's businesses continue to address challenges head-on. PPL has invested more than $20 billion over the past decade (U.S. operations) to strengthen energy grid resilience in the face of future storms, reduce power plant emissions and prepare our networks to better integrate more distributed energy resources (DERs).

Looking forward, we will continue to make improvements that strengthen reliability and advance our clean energy strategy, which includes continuing to decarbonize our generation and non-generation operations; investing in the company's renewables and energy storage businesses, advancing research and development of clean energy technology and enabling third party decarbonization through investments in our transmission and distribution networks by leveraging technology to enable more flexible, two-way flow of electricity, creating more efficiencies, connecting more DERs like micro-grids, solar, electric vehicles and energy storage to the grid.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1, 2020	December 31, 2020	Yes	3 years

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

United States of America

C0.4

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

USD

C0.5

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

Equity share

C-EU0.7

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

Row 1

Electric utilities value chain

Electricity generation
Transmission
Distribution

Other divisions

Gas storage, transmission and distribution
Smart grids / demand response
Battery storage

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	The Board's Governance and Nominating Committee (GNC) has regularly scheduled meetings at which sustainability strategy is discussed and climate-

	related issues are regularly incorporated into those discussions. The full Board is also updated as important matters arise.
Board-level committee	The Board's Audit Committee assists the Board in its oversight of the identification and management of certain broad-based enterprise risks. The Audit Committee periodically reviews the company's enterprise risk management program, including its processes for identifying, assessing and managing business risks and exposures (including sustainability and climate-related issues), as well as formulating related guidelines and policies.
Board-level committee	The Board's Finance Committee annually reviews and approves the Company's three-year business plan and five-year capital expenditure plan. The Committee has both regularly scheduled and ad hoc meetings during which it reviews and approves major capital expenditures not included in the previously approved five-year plan, as well as major acquisitions and divestitures.
Board-level committee	The Board's Compensation Committee oversees the Company's executive compensation philosophy, policies and programs and alignment with overall business strategy. The Committee has both regularly scheduled and ad hoc meetings during which it reviews and evaluates the performance of the Company's executive officers, as well as setting goals and objectives for performance.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding risk management policies Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The Board's Governance and Nominating Committee (GNC) oversees the Company's practices and positions to further its corporate citizenship, including sustainability, environmental and corporate social responsibility initiatives. The GNC has regularly scheduled meetings during which sustainability strategy is discussed and climate-related issues are regularly incorporated into those discussions. The full Board receives reports from the GNC after each GNC meeting. Management also provides the full Board with periodic updates on climate and other ESG matters, including in conjunction with the publication of the Corporate Sustainability Report. The Board periodically reviews climate and ESG-related issues as part of strategy discussions, including carbon emissions-related goals.

Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding risk management policies	The Board's Audit Committee receives quarterly reports on enterprise risk management. The Audit Committee regularly reviews risk management activities related to the company's financial statements and disclosures, certain legal and compliance matters, transition of the utility sector, and other key areas including but not limited to sustainability and climate-related issues. The full Board is also updated as important matters arise and receives reports from the Audit Committee after each Audit Committee meeting.
Scheduled – some meetings	Reviewing and guiding business plans Overseeing major capital expenditures, acquisitions and divestitures	The Board's Finance Committee annually reviews and approves the three-year business plan and the five-year capital expenditure plan. The Finance Committee also approves major capital expenditures, acquisitions and divestitures. Climate-related issues are addressed in the business and capital plans. The full Board is also updated as important matters arise and receives reports from the Finance Committee after each Finance Committee meeting.
Scheduled – some meetings	Setting performance objectives Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The Board's Compensation Committee reviews and approves annually the compensation structure, including environmental, social and governance goals and objectives, for the Company's executive officers. The full Board is also updated as important matters arise and receives reports from the Compensation Committee after each Compensation Committee meeting.

C1.2

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

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

Chief Operating Officer (COO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Chief Financial Officer (CFO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Other C-Suite Officer, please specify General Counsel	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Other, please specify Operating Company Leadership	Both assessing and managing climate-related risks and opportunities	As important matters arise
Risk committee	Assessing climate-related risks and opportunities	Quarterly
Sustainability committee	Assessing 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).

The four C-suite positions stated above (PPL's CEO, COO, CFO and General Counsel) together form PPL's Corporate Leadership Council. The CEO and these other key leadership positions have overall responsibility for setting corporate business strategy, including the company's low-carbon transition strategy. The business strategy incorporates the allocation and deployment of capital, adoption of long-term and short-term goals (including carbon reduction goals), and identification and management of climate-related risks and opportunities. CLC is informed by operating company presidents and senior leaders from across the company.

Advancing a clean energy transition while maintaining affordability and reliability is one of PPL's five corporate-level strategic objectives. PPL's clean energy strategy is focused on decarbonizing our generation and non-generation operations; enabling third party decarbonization through investments in our transmission and distribution networks and the company's renewables and storage business; and advancing research and development of clean energy technology necessary to achieve net-zero. Specific actions include: economically retiring existing coal plants in Kentucky and replacing them with less or zero carbon alternatives; building and/or acquiring renewable projects; reducing company energy use, increasing electrification of fleet vehicles and reducing emissions associated with transmission and distribution equipment and gas distribution; investing in transmission and distribution networks to allow for increased electrification, large-scale connection of distributed energy resources and delivery of renewable energy to load centers; and investing in new clean energy technologies to help us advance and accelerate reductions to achieve net-zero.

Climate-related issues are incorporated into PPL's overall enterprise risk management (ERM) and business strategy processes. Operating company leadership has primary accountability for identifying, assessing and managing climate-related risks and opportunities. Each operating company has a representative involved in the enterprise risk management process which provides a business portfolio view of material risks that may impact achievement of PPL's business strategy. PPL's Risk Management group manages this process and reports to the Board's Audit Committee quarterly and as needed. The ERM process is overseen by the Chief Financial Officer.

Climate-related issues are also incorporated in PPL's overall business strategy. The company has adopted five strategic objectives including: Achieve industry-leading performance in safety, reliability, customer satisfaction and operational efficiency; Advance a clean energy transition while maintaining affordability and reliability; Maintain a strong financial foundation and create long-term value for our shareowners; Foster a diverse and exceptional workplace; Build strong communities in the areas we serve. PPL's sustainability strategy is the Corporate Sustainability Core Team, a cross-functional and enterprise-wide team of subject matter experts who conduct analysis of sustainability priority issues and environmental, social and governance trends. The Sustainability Core Team is also responsible for developing environmental, social and governance disclosures.

A Corporate Sustainability Committee is responsible for reviewing and guiding the development of PPL's sustainability strategy, providing oversight and establishing the priorities and performance metrics. This committee consists of senior leaders throughout the corporation from the operating companies as well corporate departments including controller, audit, legal, investor relations, compliance, risk, public affairs and human resources. Company leadership, including CLC and operating company presidents, reviews, provides strategic input and approves the company's sustainability strategy, commitments and priorities. The Board's GNC has specific oversight over ESG and the company's sustainability strategy.

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	Monetary incentives for climate-related actions are provided to members of the corporate executive team as well as to certain employees for management of climate-related programs and initiatives. In addition, all employees in LG&E and KU are entitled to a monetary reward for taking mass transit.

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 inventivized	Comment
Other, please specify Designated employees	Monetary reward	Other (please specify) Management of programs and initiatives	Incentive compensation for certain employees includes management of certain programs and initiatives highlighted in this CDP response, including customer facing programs for energy efficiency and solar generation, integration and development of distributed energy resources, and alternative energy portfolio compliance.
Other, please specify All LG&E and KU employees	Monetary reward	Behavior change related indicator	Reimbursement for employees who take mass transit to work.
Corporate executive team	Monetary reward	Other (please specify) Management of programs and initiatives	Beginning in 2021, annual cash incentive goals were modified for the top executives to add 10% discretionary component based upon attainment of individual performance with a focus on the areas of safety; diversity, equity and inclusion; environmental (including climate performance); and employee engagement.

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	2	
Medium-term	3	5	
Long-term	6	30	Integrated Resource Plan (IRP) and T&D planning horizon is typically a 15-year timeframe; climate assessment and CO2 goal are 30 years.

C2.1b

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

We define substantive impact as risks or opportunities driven by factors such as shareholder and consumer preferences, market and regulatory changes that alone or in combination can drive a substantial change in the Company's business model, including its services, and portfolio of assets.

C2.2

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

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Medium-term

Description of process

Each operating company within PPL maintains robust enterprise risk management (ERM) processes. These provide the input for a corporate enterprise risk process and business portfolio view of material risks that may impact achievement of PPL's business strategy. Climate-related risk and broader ESG risks are included in this risk assessment. The time horizon for this assessment is medium-term (maximum of 5 years).

Each operating company has a representative involved in the ERM process. The ERM process is overseen by the Chief Financial Officer, with PPL Corporation's Board of Directors receiving quarterly updates. PPL's full board reviews overall strategy and risks, with the Audit Committee receiving ERM reports and the Governance and Nominating Committee receiving regular ESG reports with a discussion of key 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

Long-term

Description of process

Across our enterprise, PPL's operating companies conduct robust transmission and distribution planning each year to maintain compliance with rigorous federal, state and industry standards, enable us to deliver energy safely and reliably, and position PPL to support the clean energy transition.

PPL's planning strengthens grid resilience to reduce damage and speed recovery from severe weather impacts that could result from climate change. It also incorporates smart grid technology to reliably and efficiently integrate increased DERs, including renewable generation and energy storage.

Value chain stage(s) covered

Direct operations

Risk management process

A specific climate-related risk management process

Frequency of assessment

Every three years or more

Time horizon(s) covered

Long-term

Description of process

We have also assessed climate risk using a long-term view (2050 endpoint). We have conducted a comprehensive climate assessment, including a scenario analysis consistent with keeping global warming to no more than 2°C, and our effort carefully considered the recommendations of the Task Force on Climate-Related Financial Disclosures. We expect to update this climate assessment in 2021 in conjunction with our next Integrated Resource Plan in Kentucky.

As a result of our actions over the past decade, PPL has reduced its risk associated with climate change. The company's portfolio is now heavily focused on electricity delivery. We believe there will be significant future investment opportunities in our delivery infrastructure and cleaner energy resources.

As PPL looks to the future, we will continue to take steps to identify, understand and manage risks and opportunities associated with climate change and the transition to a cleaner energy future. This includes evaluating different options to inform business strategy, using modeling and input from our internal experts and third parties, as

needed, and reviewing assessments with senior management and our Board on an ongoing basis.

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Every three years or more

Time horizon(s) covered

Long-term

Description of process

LG&E and KU prepare an Integrated Resource Plan roughly every three years and submit the plan to the KY Public Service Commission. The planning horizon is 15 years. The primary focus of resource planning is risk management. Key categories of risk stem from uncertainties related to the way customers use electricity, the performance of generation units, the price of fuel and other commodities, and the future impact of new state and federal regulations.

Through the integrated resource planning process, LG&E and KU model the most reliable and affordable way to meet current and future demand, including considering demand management, renewable resources and carbon pricing.

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	As investor-owned utilities are heavily regulated, PPL's enterprise risk management process, as well as compliance risk management processes, consider the risks and impacts of a wide variety of state and federal regulations, many of which are climate-related and can have material impact (both as risks as well as opportunities) to the company.
Emerging regulation	Relevant, always included	PPL operates in a dynamic regulatory environment in all of its geographic locations and carefully monitors evolving and emerging legislation and regulations at the state and federal levels, including renewable and clean energy standards, carbon cap-and-trade, energy efficiency requirements, and EPA regulation of greenhouse gases.

Technology	Relevant, always included	PPL's ERM process includes analysis of emerging technologies that present risks and opportunities. These include energy storage, electric vehicles, renewable energy and smart energy grids.
Legal	Relevant, always included	Legal challenges, particularly to new regulations and company-specific regulatory approvals, can result in significant changes in risk and must always be taken into account in the company's risk assessments.
Market	Relevant, always included	Demand for power is influenced by economic conditions, consumer preferences and weather and factored into company forecasts, programs and initiatives.
Reputation	Relevant, always included	PPL's customers, investors and other stakeholders are increasingly interested in PPL's carbon footprint, and PPL's risk assessments factor stakeholder input into long-term investment decisions.
Acute physical	Relevant, always included	Increasingly frequent severe weather is presenting physical risks to PPL's system, presenting risks to reliability that must be considered as we prioritize infrastructure-related investments.
Chronic physical	Relevant, always included	Long-term, ambient temperature changes can affect PPL's facilities and operations, as well as demand for electricity. PPL considers long-term temperature trends in its operational and business planning.

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

Emerging regulation

Carbon pricing mechanisms

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Regulations that impose a cost of carbon either through a cap-and-trade program, clean energy standard or a tax would result in additional operational costs to our power delivery and power generation operations with the greatest potential impact in our Kentucky power generation operations.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

426,038,751

Potential financial impact figure – maximum (currency)

651,588,678

Explanation of financial impact figure

Financial impact calculated using PPL's 2019 domestic Scope 1 emissions and the carbon price included in LG&E and KU's Integrated Resource Plan of $17 - $26 per ton. This is very conservative as the bulk of the emissions are in Kentucky and our plan does not project a carbon price in Kentucky prior to 2026.

Cost of response to risk

720,000

Description of response and explanation of cost calculation

Cost of response is total 2020 federal lobbying expenditures. PPL manages the risk of emerging regulation and legislation through direct engagement with public officials and in partnership with our industry associations. PPL actively encourages public policy that furthers our ability to provide reliable and affordable electricity to our customers and our ability to function. PPL is also actively finding ways to provide clean energy options to its customers.

Comment

The time horizon for this risk is based on Kentucky's regulatory environment as the greatest financial impact would be in Kentucky.

Financial impact to the company is low as all prudent costs, including those to comply with regulations, are included in utility rates.

Kentucky will be submitting a 2021 IRP with updated carbon pricing numbers.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Market

Changing customer behavior

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

This risk includes shifts in demand due to changing consumer preferences as well as evolving technologies allowing new entrants into the market.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

1,500,000

Potential financial impact figure – maximum (currency)

3,700,000

Explanation of financial impact figure

Financial impact is total revenue impact to our Kentucky operations based upon current and future forecasts of reduced sales from distributed energy resources. Impact is currently mitigated by successive rate cases where load is reset.

Financial impact is based upon current regulation and tax benefits.

Cost of response to risk

148,100,000

Description of response and explanation of cost calculation

PPL is enabling the deployment of renewables and distributed energy resources through direct investments and is also actively finding ways to provide clean energy options to its customers. Cost of management is the annual capital investments of PPL Renewables and Safari, which are directly engaged in providing competitive renewable and storage products. Additionally, PPL is an anchor member of EPRI's Low Carbon Resources Initiative that promotes advancements in low-carbon electric generation technologies and low-carbon energy carrier (multi-year financial commitment included).

Comment

In addition to PPL Renewables and Safari, our Kentucky operations are taking a variety of measures to provide clean energy options to customers. LG&E and KU retain their monopoly status for all operations including generation, and all LG&E and KU's management costs are fully recoverable in rates.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Increasingly frequent and severe storms and storm systems can disrupt PPL's operations, increase costs and hurt the reliability of PPL's service in a variety of ways, including increased flooding and severe storms that could damage equipment or disrupt fuel supply, and outages due to fallen trees and debris which can bring down power lines and block access for restoration efforts.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

7,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Financial impact is PPL Electric's unrecoverable storm expense of Superstorm Sandy, the most expensive single storm event experienced across the enterprise in the last decade. Total storm expense (O&M) was $51.4 million dollars before insurance coverage.

Cost of response to risk

2,200,000,000

Description of response and explanation of cost calculation

All of PPL's operating companies monitor their reliability performance and conduct planning analyses of their systems, looking at trends in weather, vegetation management and other impacts to system reliability. Based on these analyses, PPL has invested more than $30 billion over the past decade and is continues to make extensive annual investments in infrastructure improvements, the bulk of which is for investments to modernize and strengthen its grid to be more resilient to storm impacts and other stresses on the system. Cost of response represents 2020 capital investments from Pennsylvania and Kentucky utilities.

Comment

Magnitude of impact is low due to ability of company to recover costs of storms.

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of climate adaptation, resilience and insurance risk solutions

Primary potential financial impact

Increased value of fixed assets

Company-specific description

Additional enhancements to the grid are necessary to make it stronger, more resilient and flexible to withstand increasingly frequent severe storm events, as well as to enable the connection of distributed renewable and low-carbon generation sources. Such projects support long-term earnings growth and have typically offered favorable returns on investment.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

207,700,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The magnitude of financial impact reflects the return expected on investments needed to enhance and modernize the grid, including transmission and distribution enhancements. The 2020 average authorized ROE for electric utilities of 9.44% was used as a proxy.

Cost to realize opportunity

2,200,000,000

Strategy to realize opportunity and explanation of cost calculation

All of PPL’s operating companies monitor their reliability performance and conduct planning analyses of their systems, looking at trends in weather, vegetation management and other impacts to system reliability. Cost of realize represents 2020 capital investments from Pennsylvania and Kentucky utilities.

Comment

Opportunity to earn a return on investments in modernizing and strengthening the grid in all of PPL's operating areas. Investments are recovered through customer rates.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Ability to diversify business activities

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Increased demand for renewable energy and declining cost of renewables provide new investment opportunities in the unregulated and regulated renewable and distributed energy space, including solar generation and energy storage solutions driven by customer demand, favorable policies, and retirement of existing coal plants.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Annual revenue figure for Safari is not publicly disclosed.

Cost to realize opportunity

144,500,000

Strategy to realize opportunity and explanation of cost calculation

Safari Energy, a leading provider of solar energy solutions in the United States, is investing approximately $144.5 million annually to develop solar and storage projects.

Comment

All of PPL's businesses are involved in creating new products and services to enable or generate distributed energy resources. Safari is directly engaged in this business.

C3. Business Strategy

C3.1

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

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

C3.1a

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

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	No, but we intend it to become a scheduled resolution item within the next two years	PPL has communicated through its sustainability report, annual meeting of shareowners and other public communications its clean energy strategy, which is focused on decarbonizing our generation and non-generation operations; enabling third party decarbonization through our transmission and distribution networks; and advancing research and development of clean energy technology necessary to achieve net-zero. PPL is in the process of assessing its strategy.

C3.2

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

Yes, qualitative and quantitative

C3.2a

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

Climate-related scenarios and models applied	Details
IEA 450 Other, please specify	Climate-related scenario analyses and predictive analytics are used at the enterprise level as well as at the operating company level. At the enterprise

Each operating company uses its own in-house scenario analysis.	level, these analyses guide overall business investment and strategy. At the operating company level, these analyses guide operational strategies and decisions. In 2017, PPL conducted a detailed assessment of how future requirements and technological advances aimed at limiting global warming to 2 degrees Celsius above pre-industrial levels could impact PPL. In conducting the assessment, PPL considered the recommendations of the Task Force on Climate-Related Financial Disclosures. The assessment examined several policy and technology scenarios, including a scenario consistent with limiting global temperatures to an increase of 2 degrees Celsius over pre-industrial levels as set forth in IEA 450. A report of the assessment is publicly available on PPL's website. PPL recognizes that decarbonization pathways and policy proposals continue to evolve. This will be reflected in PPL's updated climate assessment expected in 2021. The 2017 assessment formed the basis for PPL's first carbon reduction goal, and PPL will continue to use these assessments to guide PPL's long-term business strategy. At the operating company level, all companies monitor their reliability performance and conduct planning analyses of their systems, looking at trends in weather, vegetation management and other impacts to system reliability under various scenarios. For example, as part of these analyses in Pennsylvania, PPL Electric is using LIDAR technology that maps individual trees along transmission rights-of-way. This helps identify any tree that is damaged or diseased before it falls across a power line.

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	The reliability of PPL's electric service is at risk of being impacted by increasingly frequent severe storm events as well as the increase in distributed energy resources and private renewable energy. This poses a risk of adversely affecting PPL's reputation and future rate recovery but also presents the opportunity to invest in modernizing the grid with more storm-resistant materials, increased redundancies, automated systems and more data-driven management of the grid. PPL is also making enhancements necessary to meet electricity demand over the longer-term to support the adoption of electricity-fueled transportation.

		In addition to grid enhancements, PPL is offering new types of products and services in response to increasing public desire for renewable energy. In 2016, LG&E and KU built the largest universal solar facility in Kentucky and in 2019 begun construction of a community solar site. In 2018, PPL acquired Safari Energy, a leading provider of solar energy solutions for commercial customers in the United States.
Supply chain and/or value chain	Yes	Through PPL's Supplier Code of Conduct, suppliers have an obligation to carry out all of their activities on our behalf in ways that preserve and promote a clean, safe and healthy environment, which includes understanding and abiding by our environmental policies and the environmental laws and regulations applicable to the locations in which we operate. PPL Electric requires electricity suppliers to provide sufficient renewable energy credits to allow PPL Electric to meet Pennsylvania's Alternative Energy Portfolio Standards requirements. Additionally, PPL Electric is purchasing remanufactured furniture from its furniture manufacturer and supplier and intends to purchase remanufactured office panels going forward. In 2019, LG&E and KU issued a request for proposal to energy suppliers for solar energy to meet increasing demand for renewable energy from certain customers. Additionally, LG&E and KU issued requests for proposals in January 2021, seeking 300 to 900 megawatts of electricity beginning in 2025 to 2028. The utilities have also asked for proposals for at least 100 megawatts of battery storage. The requests for proposals will allow us the opportunity to evaluate several options to ensure that we continue to meet our obligations to serve our Kentucky customers' energy needs in the most reliable, least-cost fashion.
Investment in R&D	Yes	PPL is a long-time member of the Electric Power Research Institute (EPRI) which conducts research and development on a variety of electric sector topics including climate change, carbon capture and electrification. PPL is a participant in research projects to advance low-carbon technologies including the Low-Carbon Resources Initiative (LCRI) to accelerate the development and demonstration of low-carbon energy technology. PPL's CEO chairs EPRI's board working group for the LCRI. PPL also announced in 2021 that the company is investing

		in an energy transition R&D fund through Energy Impact Partners' purpose-driven global investment platform. The Elevate Fund will be focused on investing in companies founded or run by diverse talent that are driving innovation to advance the low carbon economy, including supply decarbonization, electrification, tech enabled infrastructure, reliability and resilience, and intelligent demand. PPL Electric is participating in the Keystone Solar Future Project which leverages several different grid technologies to develop a distributed system platform that bridges the gap between existing and future technologies by monitoring, controlling, and optimizing high penetration of solar generation. Additionally, PPL Electric is working to carry out a 500-customer pilot on at least 10 distribution circuits. LG&E and KU have created an Energy Storage Research and Demonstration Site to continue developing large-scale battery storage technologies. LG&E and KU have partnered with the University of Kentucky's Center for Applied Energy Research to further research and development of solvent based, post-combustion carbon capture technology.
Operations	Yes	Operational impacts are primarily related to enhancing and managing the grid in all of PPL's service areas to meet the growing demand for renewable energy, and to address physical risks from increasingly frequent severe storms. Generation planning in KY balancing clean energy transition with reliability and affordability.

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	PPL has adopted a clean energy transition strategy aimed at decarbonizing our generation and non-generation operations; investing in research and development necessary to reduce emissions from remaining generation and realize deployable, affordable and reliable clean energy technologies; and enabling third-party decarbonization by bringing smart grid and renewable energy solutions to our customers. Climate-related issues are assessed and integrated in business

	Acquisitions and divestments Access to capital Assets Liabilities	objectives and strategy at various levels throughout the company. Strategy groups across our company evaluate different options to inform business strategy, using modeling and input from our internal experts and third parties as needed. Ultimately, these assessments inform our business strategy at the enterprise level and the operating company level. The company reduced its carbon emissions by nearly 60% from 2010 to 2020. In August 2021, PPL set a new goal to achieve net-zero carbon emissions by 2050. In addition, the company is targeting an 80% reduction in emissions from 2010 levels by 2040, a decade earlier than our prior goal, and a 70% reduction by 2035. Moving forward, we'll be informed by an updated integrated resource plan in Kentucky and a new climate report that we will issue in Fall 2021. We will evaluate updated scenarios through development of the climate report, including a scenario that aligns with a 1.5°C case. Capital allocation and expenditures We have invested more than $30 billion over the past decade to strengthen grid resilience in the face of future storms, reduce power plant emissions and prepare networks to better integrate more distributed energy resources, including renewables and energy storage. Examples include: • LG&E and KU implemented a Renewable Power Agreement for customers interested in purchasing renewable power. A new solar facility, expected to be completed and commercially available in 2023, will provide two large industrial customers and the utilities' electric customers with up to a combined 200 megawatts of solar energy. • LG&E and KU offer a Solar Share program, which gives residential, business and industrial customers the opportunity to share in local solar energy and receive credits on their monthly bills. Four of the eight 500-kilowatt sections of LG&E and KU's Solar Share Program are fully subscribed, the fifth array is nearly complete and the company is currently accepting applications for a sixth section. • PPL Electric, from June 2019 to May 2020, purchased 15.7% of total electricity from renewable and alternative sources for delivery to customers who had not chosen a competitive generation supplier. This included 7.5% from solar, wind and hydropower energy sources • PPL Electric, from June 2020 to May 2021, purchased 18% of total electricity from renewable and alternative sources for delivery to customers who had not chosen a competitive generation supplier. This included 0.5% from solar, and 7.5% from wind, low-impact hydropower and biomass energy sources. • PPL Electric developed and implemented an advanced Distributed Energy Resource Management System designed to manage solar, wind and other renewable power coming onto the grid. PPL Electric received

		approval from the Pennsylvania Public Utility Commission to require smart inverters on renewable energy installations to ensure the safety and reliability of PPL's distribution system. • PPL Electric implemented a user-friendly Renewable Energy Connection website. As of December 2020, PPL Electric has connected more than 235.5 megawatts of renewable energy to the grid through the program. • PPL is investing in clean energy R&D across the company, and PPL in 2020 became an anchor sponsor of the new Low-Carbon Resources Initiative led by the Electric Power Research Institute and Gas Technology Institute initiative, which is focused on advancing clean energy technology to support deep, economy-wide decarbonization. • Collectively, PPL's operating companies set goals to reduce carbon emissions by more than 2,800 metric tons between 2020-2025 through electrification of fleet vehicles, with an additional reduction of more than 2,500 metric tons expected between 2026-2030. Acquisitions and divestments In 2018, PPL acquired Safari Energy, LLC, which has developed or acquired more than 500 commercial scale solar projects since 2008. Safari spans 24 states and Washington, D.C., with projects generating approximately 618,942 megawatt hours of electricity, or the equivalent of avoiding more than 437,000 metric tons of CO2e. PPL has deployed up to $144.5 million a year in capital for this business and expanded its business model beyond simply building and selling solar facilities to developing, acquiring and owning solar. Through 2020, Safari has already acquired more than 100 solar projects. This included adding more than 90 megawatts of solar generation in 2020. We've divested or retired more than 5,200 megawatts of generation since 2010, resulting in an asset portfolio heavily weighted toward transmission and distribution. This includes the retirement of 1,200 megawatts of coal-fired generation in Kentucky. We replaced a significant portion of the retired generation in Kentucky with a new, efficient 640-megawatt, natural gas combined-cycle generating unit that began operation in 2015. Additional capacity was not necessary to meet customer demand. We expect to achieve a 70% reduction in coal-fired capacity by 2035, 90% by 2040 and 95% by 2050 from our 2010 baseline. This includes the expected retirement of 1,000 megawatts of coal-fired power plants by 2028. Our utilities in Kentucky issued requests for proposals in January 2021, seeking 300 to 900 megawatts of electricity beginning in 2025 to 2028. Additionally, LG&E and KU have asked for proposals for at least 100 megawatts of battery storage. The requests for proposals will allow us the opportunity to evaluate several options to ensure that

		we continue to meet our obligations to serve our Kentucky customers' energy needs in the most reliable, least-cost fashion.

C3.4a

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

C4. Targets and performance

C4.1

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

Absolute target

C4.1a

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

Target reference number

Abs 1

Year target was set

2017

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Other, please specify

Scope 1 + 2 (location and market-based)

Base year

2010

Covered emissions in base year (metric tons CO2e)

62,577,296

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

99.9

Target year

2040

Targeted reduction from base year (%)

70

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

18,773,188.8

Covered emissions in reporting year (metric tons CO2e)

25,651,166

% of target achieved [auto-calculated]

84.2983280801

Target status in reporting year

Underway

Is this a science-based target?

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

Target ambition

Please explain (including target coverage)

PPL's 2050 goal was publicly announced in January 2018 and covers Scope 1 and Scope 2 CO2e emissions. In February 2020, PPL increased its carbon reduction goal and adopted a more aggressive timeline for achievement of the original goal – 80% reduction by 2050 and a 70% reduction by 2040. Through our efforts to economically transition our generation fleet, responsibly expand our unregulated renewable generation and reduce emissions elsewhere in our operations, we are on track to reduce our goal-related emissions by nearly 70% by 2035 and 80% by 2040. Regarding calculation of Scope 2 emissions, LG&E and KU's emissions are calculated using a hybrid of location based and market-based factors. LG&E and KU have access to location-based factors for power procured from specific contracted units. LG&E and KU also purchase a small amount of power in the wholesale market. Emissions associated with all electric and gas use in buildings across all operations (LG&E, KU, and PPL Electric) are calculated based on market-based factors.

Target reference number

Abs 2

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Other, please specify

Scope 1 + 2 (location and market-based)

Base year

2010

Covered emissions in base year (metric tons CO2e)

62,577,296

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

99.9

Target year

2050

Targeted reduction from base year (%)

80

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

12,515,459.2

Covered emissions in reporting year (metric tons CO2e)

25,651,166

% of target achieved [auto-calculated]

73.7610370701

Target status in reporting year

Underway

Is this a science-based target?

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

Target ambition

Please explain (including target coverage)

PPL's 2050 goal was publicly announced in January 2018 and covers Scope 1 and Scope 2 CO2e emissions. In February 2020, PPL increased its carbon reduction goal and adopted a more aggressive timeline for achievement of the original goal – 80% reduction by 2050 and a 70% reduction by 2040. Through our efforts to economically transition our generation fleet, responsibly expand our unregulated renewable generation and reduce emissions elsewhere in our operations, we are on track to reduce our goal-related emissions by nearly 70% by 2035 and 80% by 2040. Regarding calculation of Scope 2 emissions, LG&E and KU's emissions are calculated using a hybrid of location based and market-based factors. LG&E and KU have access to location-based factors for power procured from specific contracted units. LG&E and KU also purchase a small amount of power in the wholesale market. Emissions associated with all electric and gas use in buildings across all operations (LG&E, KU, and PPL Electric) are calculated based on market-based factors.

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
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
Business division

Target type: absolute or intensity
Absolute

Target type: energy carrier
Electricity

Target type: activity
Consumption

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

Metric (target numerator if reporting an intensity target)
Percentage

Target denominator (intensity targets only)

Base year
2007

Figure or percentage in base year
5.7

Target year
2021

Figure or percentage in target year

18

Figure or percentage in reporting year

18

% of target achieved [auto-calculated]

100

Target status in reporting year

Achieved

Is this target part of an emissions target?

No

Is this target part of an overarching initiative?

Other, please specify

Pennsylvania Act 129

Please explain (including target coverage)

PPL Electric's PA Alternative Energy Portfolio Standard ("AEPS") for CY2020 is 18%, which we achieved. This is the final target under the current PA AEPS Act.

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

2016

Target coverage

Business division

Target type: absolute or intensity

Absolute

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

Energy consumption or efficiency

MWh

Target denominator (intensity targets only)

Base year

2016

Figure or percentage in base year

Target year
2021

Figure or percentage in target year
1,443,035

Figure or percentage in reporting year
1,443,035

% of target achieved [auto-calculated]

Target status in reporting year
Achieved

Is this target part of an emissions target?
No

Is this target part of an overarching initiative?
Other, please specify
Pennsylvania Act 129

Please explain (including target coverage)
PPL Electric has achieved Act 129 Phase 3 targets. Phase IV (new targets) is currently projected to go into effect in 2021 – pending PA PUC action and order.

Target reference number
Oth 2

Year target was set
2020

Target coverage
Business division

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)
Low-carbon vehicles
Other, please specify
Reduction of carbon emissions by utilizing electric vehicles

Target denominator (intensity targets only)

Base year
2020

Figure or percentage in base year
10,845

Target year
2025

Figure or percentage in target year
8,577

Figure or percentage in reporting year
10,845

% of target achieved [auto-calculated]
0

Target status in reporting year
New

Is this target part of an emissions target?
No

Is this target part of an overarching initiative?
Other, please specify
Part of PPL's enterprise carbon reduction goal

Please explain (including target coverage)
PPL Electric is working to make system enhancements necessary to meet electricity demand over the long term to support electrification efforts, including the adoption of electricity-fueled transportation. PPL Electric set a goal to spend 10% of transportation capital on EV technology from 2020 to 2025, which will result in the replacement of more than 80% of bucket trucks with electric lift technology bucket trucks by 2025.

Target reference number
Oth 3

Year target was set
2020

Target coverage
Business division

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)
Low-carbon vehicles

Other, please specify

Reduction of carbon emissions by utilizing electric vehicles

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

14,665

Target year

2030

Figure or percentage in target year

11,337

Figure or percentage in reporting year

14,665

% of target achieved [auto-calculated]

0

Target status in reporting year

New

Is this target part of an emissions target?

No

Is this target part of an overarching initiative?

Other, please specify

Part of PPL's enterprise carbon reduction goal

Please explain (including target coverage)

LG&E and KU are working to make system enhancements necessary to meet electricity demand over the long term to support electrification efforts, including the adoption of electricity-fueled transportation. LG&E and KU pledged to electrify 10% of its transportation fleet by 2030 by replacing end of lease light-duty vehicles with a combination of electric vehicles or plug-in hybrids and outfitting heavy-duty vehicles with plug-in idle mitigation units.

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	2	
To be implemented*	1	
Implementation commenced*	4	971
Implemented*	12	485,365
Not to be implemented	0	

C4.3b

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

Initiative category & Initiative type

Energy efficiency in buildings

Other, please specify

Customer energy efficiency programs reducing consumption and peak demands

Estimated annual CO2e savings (metric tonnes CO2e)

86,819

Scope(s)

Scope 3

Voluntary/Mandatory

Mandatory

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

15,585,221

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

40,813,529

Payback period

No payback

Estimated lifetime of the initiative

11-15 years

Comment

PPL Electric: Pennsylvania Act 129 legislation, which became effective in November 2008, requires EDC's to cost-effectively reduce electricity consumption and peak demand on their systems. The reported calendar year 2020 period marks the final full year of the current plan. Total energy savings for CY2020 was 224,916 MWhs.

The next phase of Act 129 begins June 1, 2021, with PPL Electric having already submitted and received PA PUC approval for its next phase plan.

Note: Payback period is applicable only to customers and varies based on each project.

Initiative category & Initiative type

Low-carbon energy consumption
Low-carbon electricity mix

Estimated annual CO2e savings (metric tonnes CO2e)

307,392

Scope(s)

Scope 3

Voluntary/Mandatory

Mandatory

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

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

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

PPL Electric: Alternative Energy Portfolio Standards Act requires Pennsylvania’s Electric Distribution Companies (EDC's) to purchase a set amount of power from alternative sources like solar, wind and biofuels. By 2021, companies will need to purchase eight percent of their overall power from “tier 1” renewable energy sources.

Initiative category & Initiative type

Fugitive emissions reductions
Other, please specify
Reduction of SF6 emissions

Estimated annual CO2e savings (metric tonnes CO2e)

3,324

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

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

22,068,000

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

PPL Electric: Reductions are the 10-year average reduction in 2020 emissions compared to 2010 emissions. Since 2014, PPL Electric has improved its leak rate faster than industry peers while increasing the total SF6 gas on the system by 209% and decreasing losses by 86% for an overall leak rate reduction of 93%. Based on the latest EPA benchmark data, this is 7th best in the country and top decile performance.

Payback period not yet calculated.

Initiative category & Initiative type

Company policy or behavioral change

Other, please specify

Carbon sequestration

Estimated annual CO2e savings (metric tonnes CO2e)

79

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

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

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

125,000

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

PPL Electric: Beginning in 2017, PPL Electric developed a new program within its service territory that focused on community environmental awareness and engagement through tree donations and school outreach. The carbon sequestration benefits resulted were calculated using a 1998 publication by the U.S. Department of Energy for the "Calculation process for determining CO2e sequestration from planting various trees." Through 2020, PPL Electric has realized 107.9 metric tonnes of CO2e sequestration through this tree program. Actual annual sequestration is dependent on success rate of plants.

Initiative category & Initiative type

Company policy or behavioral change
Supplier engagement

Estimated annual CO2e savings (metric tonnes CO2e)

58.84

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

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

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

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

PPL Electric: The use of remanufactured furniture for PPL Electric is ongoing and it is our intent to buy all furniture panels going forward as remanufactured. Our furniture manufacturer has significantly reduced the amount of waste and CO2 in their production product. Using them as our furniture supplier demonstrates our commitment to a cleaner environment.

Initiative category & Initiative type

Low-carbon energy consumption
Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

18.2

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

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

Payback period

11-15 years

Estimated lifetime of the initiative

Comment

PPL Electric: The first major solar project was completed at our Quarryville Service Center. This system produced 38 MWh of power in 2019 and 45.19 MWh in 2020. The CO2 equivalency for this first project already is 24.7 tons CO2 and counting. PPL Electric is working to develop and install a second system at another service center in the near future.

Initiative category & Initiative type

Energy efficiency in buildings
Maintenance program

Estimated annual CO2e savings (metric tonnes CO2e)

13,332

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

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

Payback period

4-10 years

Estimated lifetime of the initiative

Ongoing

Comment

PPL Electric: For 2020, all of PPL Electric's buildings emitted a total of 19,767 metric tons of CO2 equivalent emissions based on power usage. When compared to PPL Electric's 2014 equivalent emissions of 33,099 metric tons of CO2, this represents a reduction of 13,332 tons of CO2 emission reductions. This was achieved through building upgrades and modernization efforts which reduces power usage that directly benefits the environment.

Initiative category & Initiative type

Fugitive emissions reductions

Other, please specify

Reduction of SF6 Emissions

Estimated annual CO2e savings (metric tonnes CO2e)

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

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

32,956,876

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

PPL Electric: In an effort to increase efficiency in system performance and maintenance as well as meet evolving environmental standards, for all voltage classes with the available technology, PPL Electric is at the implementation stage of installing vacuum circuit breakers to replace existing gas circuit breakers. Vacuum Circuit Breakers are an environmentally friendly alternative to SF6 for insulating medium and high-voltage electrical equipment. Vacuum technology uses dry air as insulation material and has been demonstrated as highly reliable through 10,000 open/close mechanical operations tests. In addition to resolving the environmental and safety concerns associated with the

use of chemical insulation, vacuum technology has an extended maintenance cycle and reduced arcing time, which allows for substantially more switching operations prior to required maintenance.

Initiative category & Initiative type

Low-carbon energy generation
Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

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

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

Payback period

No payback

Estimated lifetime of the initiative

3-5 years

Comment

PPL Electric: Pennsylvania PUC approval was granted in December 2020 to the Distribution Energy Resources (DER) petition agreed upon between PPL Electric and external stakeholders. The petition requires smart inverters for all new DER interconnections on PPL Electric system as part of a 3-year pilot program for PPL Electric to demonstrate through monitoring and management improved reliability and lower costs for customers. Program begins January 1, 2021.

Current year to date (7/1/2021) PPL Electric has 250 DER installations in the program.

Initiative category & Initiative type

Low-carbon energy generation
Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

971

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

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

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

LG&E and KU: LG&E and KU's Solar Share program gives residential, business and industrial customers the opportunity to share in local solar energy and receive credits on their monthly bills. Four of the eight 500-kilowatt sections of LG&E and KU's Solar Share Program are fully subscribed, the fifth array is nearly complete and the company is currently accepting applications for a sixth section.

Investment and payback calculated on a project-specific basis.

Initiative category & Initiative type

Energy efficiency in buildings

Other, please specify

Demand Side Management Programs

Estimated annual CO2e savings (metric tonnes CO2e)

68,604

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

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

14,000,000

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

LG&E and KU: In 2020 LG&E and KU invested $14M in Demand Side Management Programs, which includes:
• Low-Income Weatherization Program
• Advanced Metering Program Residential and Commercial Demand Response Programs,
• Non-residential Rebates Program

LG&E and KU generates and delivers electricity, as such these initiatives directly reduced Scope 1 emissions.

Payback period is applicable only to customers and varies based on each project.

Initiative category & Initiative type

Fugitive emissions reductions
Other, please specify
Reduction of SF6 Emissions

Estimated annual CO2e savings (metric tonnes CO2e)

5,334

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

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

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

LG&E and KU: Reductions are the 10-year average reduction in 2020 emissions compared to 2010 emissions. LG&E and KU are replacing equipment to reduce SF6 emissions (O&M expense).

Initiative category & Initiative type

Fugitive emissions reductions
Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)
0.45

Scope(s)
Scope 1

Voluntary/Mandatory
Voluntary

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

Investment required (unit currency – as specified in C0.4)
101,000,000

Payback period
No payback

Estimated lifetime of the initiative
11-15 years

Comment
LG&E and KU: LG&E and KU are using advanced in-line inspection tools to identify gas leaks more quickly and effectively.

Initiative category & Initiative type
Company policy or behavioral change
Other, please specify
Carbon Sequestration

Estimated annual CO2e savings (metric tonnes CO2e)
375

Scope(s)
Scope 3

Voluntary/Mandatory
Voluntary

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

Investment required (unit currency – as specified in C0.4)
69,930

Payback period
No payback

Estimated lifetime of the initiative

Ongoing

Comment

LG&E and KU: LG&E and KU's Plant for the Planet matching grant program, which began in 2009, has contributed to more than 56,000 plantings. These projects have occurred in a range of urban and rural areas that offer public access, including parks and nature preserves. The carbon sequestration benefits resulted were calculated using a 1998 publication by the U.S. Department of Energy for the "Calculation process for determining CO2e sequestration from planting various trees." Since the program starting in 2009, LG&E and KU has sequestered 2,440.6 metric tonnes of CO2e. Actual annual sequestration is dependent on success rate of plants.

Initiative category & Initiative type

Low-carbon energy generation

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

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

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

LG&E and KU: LG&E and KU offers a Green Tariff to support the growth of renewable and economic development in Kentucky. New or existing businesses can choose from several options to meet their renewable energy goals, including purchasing renewable energy certificates through the Green Energy Program, building a solar array or purchasing solar, hydro or wind power through the utility's renewable energy power agreement.

Initiative category & Initiative type

Low-carbon energy generation
Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

Scope(s)
Scope 1

Voluntary/Mandatory
Voluntary

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

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

Payback period
No payback

Estimated lifetime of the initiative
Ongoing

Comment
LG&E and KU: LG&E and KU implemented a Renewable Power Agreement for customers interested in purchasing renewable power. LG&E and KU received approval from the Kentucky Public Service Commission for three separate renewable power agreements. These agreements include:
• Renewable Power Agreement with Toyota Motor Manufacturing in Georgetown for LG&E and KU Energy to supply solar energy to site (50% Rhudes Creek Solar facility, or 50 MW).
• Renewable Power Agreement with Dow Silicones Corporation in Carrollton for LG&E and KU Energy to supply solar energy to site (25% Rhudes Creek Solar facility, or 25 MW).
• Renewable Power Agreement with Rhudes Creek Solar to build a new 100-megawatt solar photovoltaic facility in Hardin County (LG&E and KU will utilize 25% to serve customers, or 25 MW). Rhudes Creek Solar is expected to be completed and commercially available in 2022.

Initiative category & Initiative type
Low-carbon energy generation
Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)
29

Scope(s)
Scope 1

Voluntary/Mandatory

Voluntary

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

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

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

LG&E and KU: The Business Solar Program offers LG&E and KU customers the ability to support solar/renewable energy sources without upfront cost and maintenance. LG&E and KU will build, own and operate a roof mount or ground mount solar array on the customer's property based on their needs. The customers pay a monthly equipment fee and receives monthly bill credits based on the production of the array. Each Business Solar install requires contract approval by the KY Public Service Commission.

The first Business Solar array (30 kw) was designed, installed and commissioned in 2018 at the Archdiocese of Louisville Pastoral Center and continues to operate.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	Regulatory requirements related to energy efficiency, DSM and smart grids are driving investments in Pennsylvania. In Kentucky we are making smart grid investments to support energy efficiency and DSM programs.
Dedicated budget for energy efficiency	Under Pennsylvania's Act 129, PPL Electric has a $312.5 million budget over 5 years for a program to incentivize its customers to install more energy-efficient lighting, HVAC equipment, motors, etc.
Financial optimization calculations	Financial calculations are driving renewable energy investments by Safari Energy.
Partnering with governments on technology development	PPL Electric's Keystone Solar Future Project is a three-year project funded in part by a grant from the U.S. Department of Energy. The project includes several private and public-sector partners to evaluate management of high levels of DR and the value of an integrated grid.

Dedicated budget for energy efficiency	LG&E and KU has a dedicated budget for research and development related to battery storage operations and maintenance.
Dedicated budget for other emissions reduction activities	LG&E and KU are performing trials with vacuum breakers as an alternative to utilization of SF6 breakers. PPL Electric is in the implementation stage of replacing SF6 breakers with vacuum breakers on 69kV transformers.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Product

Description of product/Group of products

Customer Energy Efficiency and Demand Side Management Services

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

Avoided emissions

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

Other, please specify

Avoided emissions based on reduced consumption of electricity

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

Comment

Across the enterprise, these services include energy audits, winterization, appliance rebates, demand response and education to modify energy consumption behaviors. These services reduce revenue due to reduced use of our product (electricity).

Level of aggregation

Product

Description of product/Group of products

Alternative Energy Portfolio

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

Low-carbon product and avoided emissions

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

Low-Carbon Investment (LCI) Registry Taxonomy

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

Comment

For PPL Electric, the Alternative Energy Portfolio Standards Act requires Pennsylvania Electric Distribution Companies to purchase a set amount of power from alternative sources like solar, wind and biofuels. By 2021 this must be 18% from renewable and low-carbon sources. These services have no impact on revenue.

Level of aggregation

Product

Description of product/Group of products

Low-carbon energy

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

Low-carbon product and avoided emissions

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

Low-Carbon Investment (LCI) Registry Taxonomy

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

Comment

LG&E and KU's Business Solar Program offers customers the ability to support solar/renewable energy sources without upfront cost and maintenance. LG&E and KU will build, own and operate a roof mount or ground mount solar array on the customer's property based on their needs. The customers pay a monthly equipment fee and receives monthly bill credits based on the production of the array. Each Business Solar install requires contract approval by the KY Public Service Commission.

Level of aggregation

Product

Description of product/Group of products

Low-carbon energy

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

Low-carbon product and avoided emissions

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

Low-Carbon Investment (LCI) Registry Taxonomy

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

Comment

LG&E and KU are providing customers the opportunity to purchase low-carbon energy through participating in LG&E and KU's Community Solar Program.

Level of aggregation

Product

Description of product/Group of products

Alternative SF6 Breakers

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

Avoided emissions

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

Other, please specify

Avoided emissions based on reduced use of SF6 breakers.

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

Comment

LG&E and KU are performing trials with vacuum breakers as an alternative to utilization of SF6 breakers.

Level of aggregation

Group of products

Description of product/Group of products

Alternative Energy Portfolio

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

Low-carbon product and avoided emissions

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

Low-Carbon Investment (LCI) Registry Taxonomy

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

100

Comment

PPL Renewables and Safari develop, own and operate solar and storage projects that provide renewable energy to C&I, MUSH and Utility customers for periods ranging from 15 years to over 40 years. Percent of revenue is specific of the PPL Renewables and Safari business segment.

C-EU4.6

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

LG&E employs comprehensive natural gas safety and leak detection measures that include 24/7 monitoring by a central Gas Control Room; conducting leak surveys; operating a Pipeline Integrity Management Program that identifies and minimizes potential pipeline risks; and educating community partners and the general public about natural gas safety. LG&E's Lost and Unaccounted for Gas as reported on our Gas Annual Reported filed with the Pipeline and Hazardous Materials Safety Administration was 1.1% for the year ending June 30, 2020, an amount well within the industry average. The metric includes gas lost through leaks, theft and losses due to operations and maintenance functions when necessary. In addition to these ongoing efforts, the company's plan for natural for natural gas infrastructure updates include:

- Proactively replacing aging steel customer service lines, with new plastic pipe;
- LG&E implemented a program to replace approximately 45,000 steel customer service lines and removal of approximately 4,400 inactive steel services. The steel customer service lines are largely 30 to 35 years old or greater and susceptible to corrosion leaks. Through 2020, LG&E has replaced, removed or verified about 8,300 customer services lines and removed 3,300 inactive steel services.
- Replacing aging natural gas transmission lines;
    - LG&E implemented a Transmission Modernization program to replace approximately 15.5 miles of transmission pipeline in Jefferson County. The transmission line is 45 – 60 years old. Through 2020, approximately 8 miles had been installed with over 3 miles placed into service. It is anticipated the project will be largely complete by the end of 2021.
- Upgrades to city gate stations and gas regulation facilities with new valves, piping, and modern regulation and measurement equipment.

A gas main replacement program completed an initiative the utility began implementing in its system beginning in 1996 as it established a program committing to replacing 540 miles of cast iron, wrought iron and bare steel natural gas pipelines, which are more vulnerable to degradation over time. These lines were replaced primarily with more durable plastic natural gas pipelines. The facility portion of this project was completed in 2017 with some restoration completed in 2018. Additionally, vintage plastic mains and associated services were replaced in 2016 and 2017 with modern plastic natural gas pipelines.

Gas Distribution Operations complies with all Pipeline and Hazardous Materials Safety Administration (PHMSA) and state regulatory requirements to prevent gas release.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1, 2010

Base year end
December 31, 2010

Base year emissions (metric tons CO2e)
60,906,564

Comment
Scope 1 (Gross): 60,736,086 + Scope 1 (Fleet Vehicles): 48,343 + Scope 1 (Small Plant Stationary): 2,515 + Scope 1 (Plant Mobile Equipment): 4,893 + Scope 1 (SF6): 114,727

Scope 2 (location-based)

Base year start
January 1, 2010

Base year end
December 31, 2010

Base year emissions (metric tons CO2e)
1,252,638

Comment
Estimated location-based CO2 emissions.

Scope 2 (market-based)

Base year start
January 1, 2010

Base year end
December 31, 2010

Base year emissions (metric tons CO2e)
344,519

Comment
Estimated market-based CO2 emissions.

C5.2

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

US EPA Mandatory Greenhouse Gas Reporting Rule

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

25,061,103

Start date

January 1, 2020

End date

December 31, 2020

Comment

Scope 1 (Gross): 24,971,324 + Scope 1 (Fleet Vehicles): 25,510 + Scope 1 (Small Plant Stationary): 2,297 + Scope 1 (Plant Mobile Equipment): 5,157 + Scope 1 (Gas Operations): 22,204 + Scope 1 (SF6) 34,611

2020 Scope 1 carbon emissions reported here do not reflect an additional 29,019 metric tonnes attributed to WPD, which was sold on June 14, 2021. Previous years data have not been adjusted to reflect the sale of our U.K. business.

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

26,913,754

Start date

January 1, 2019

End date

December 31, 2019

Comment

Scope 1 (Gross): 26,740,576 + Scope 1 (Fleet Vehicles): 46,646 + Scope 1 (Small Plant Stationary): 4,056 + Scope 1 (Plant Mobile Equipment): 5,898 + Scope 1 (Gas Operations): 27,909 + Scope 1 (SF6) 88,669

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

29,609,494

Start date

January 1, 2018

End date

December 31, 2018

Comment

Scope 1 (Gross): 29,480,129 + Scope 1 (Fleet Vehicles): 43,256 + Scope 1 (Small Plant Stationary): 1,097 + Scope 1 (Plant Mobile Equipment): 6,459 + Scope 1 (Gas Operations): 29,040 + Scope 1 (SF6): 49,513

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)

28,587,423

Start date

January 1, 2017

End date

December 31, 2017

Comment

Scope 1 (Gross): 28,407,677 + Scope 1 (Fleet Vehicles): 47,630 + Scope 1 (Small Plant Stationary): 8,984 + Scope 1 (Plant Mobile Equipment): 4,893 + Scope 1 (Gas Operations): 28,132 + Scope 1 (SF6): 90,107

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

LG&E and KU purchased power is currently classified as a Scope 2 emission by the company. These purchased power emissions are calculated using a hybrid of location based and market-based factors. LG&E and KU have access to location-based factors for power procured from specific contracted units. LG&E and KU also purchase a small amount of power in the wholesale market. Emissions associated with all electric and gas

use in buildings across all operations (PPL Electric, LG&E and KU) are calculated based on market-based factors.

C6.3

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

Reporting year

Scope 2, location-based

541,242

Scope 2, market-based (if applicable)

35,849

Start date

January 1, 2020

End date

December 31, 2020

Comment

LG&E and KU's market-based emissions from electricity use in buildings are captured in Scope 1 Gross MWh. 2020 Scope 2 market-based carbon emissions reported here do not reflect an additional 6,157 metric tonnes attributed to WPD, which was sold on June 14, 2021. Previous years data have not been adjusted to reflect the sale of our U.K. business.

Past year 1

Scope 2, location-based

532,952

Scope 2, market-based (if applicable)

48,560

Start date

January 1, 2019

End date

December 31, 2019

Comment

LG&E and KU's market-based emissions for building electricity use and gas use have been corrected for all years.

Past year 2

Scope 2, location-based

241,199

Scope 2, market-based (if applicable)
51,755

Start date
January 1, 2018

End date
December 31, 2018

Comment

Past year 3

Scope 2, location-based
470,110

Scope 2, market-based (if applicable)
53,684

Start date
January 1, 2017

End date
December 31, 2017

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?
No

C6.5

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

Purchased goods and services

Evaluation status
Relevant, calculated

Metric tonnes CO2e
6,134,749

Emissions calculation methodology
EPA emission factors

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

0

Please explain

CO2e for total purchased electricity for end use electric customers in PA and end use gas customers in KY. Purchased electricity in KY is included in Scope 1.

Capital goods

Evaluation status

Relevant, not yet calculated

Please explain

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

Evaluation status

Relevant, not yet calculated

Please explain

Upstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Please explain

Waste generated in operations

Evaluation status

Relevant, not yet calculated

Please explain

Primary waste would be disposal or recycling of wood poles. Not calculated because of insignificant total.

Business travel

Evaluation status

Relevant, not yet calculated

Please explain

Employee commuting

Evaluation status

Relevant, not yet calculated

Please explain

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Insignificant as PPL does not generally lease assets from others.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

The electricity and natural gas that we deliver to end users is not further transported or distributed.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

The electricity and natural gas that we deliver to end users is not further processed.

Use of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

2,002,542

Emissions calculation methodology

Electric Greenhouse Gas Reporting Tool Subpart NN

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

0

Please explain

Value is calculated with LG&E and KU internal data for the quantity of natural gas sold.

End of life treatment of sold products

Evaluation status

Relevant, not yet calculated

Please explain

LG&E and KU maximizes the amount of coal combustion residuals that are beneficially reused offsite. Examples of end-of-life treatments are wallboard, cement, concrete, etc.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

PPL does not lease its assets to others.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

We have no upstream or downstream franchises.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

There are no upstream or downstream investments resulting in any additional CO2e emissions.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

We have no other (upstream) CO2e emissions.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

We have no other (downstream) CO2e emissions.

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		Relevant to vegetation management and siting of facilities. Not yet calculated.

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

0.00337

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

25,638,194

Metric denominator

unit total revenue

Metric denominator: Unit total

7,607,000,000

Scope 2 figure used

Location-based

% change from previous year

4.8

Direction of change

Decreased

Reason for change

Increase in revenue and decrease in emissions, resulting in a lower intensity.

2020 Scope 1 and 2 carbon emissions reported here do not reflect an additional 35,176 metric tonnes attributed to WPD, which was sold on June 14, 2021. Previous years data have not been adjusted to reflect the sale of our U.K. business.

Intensity figure

0.83

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

24,971,324

Metric denominator

megawatt hour generated (MWh)

Metric denominator: Unit total

29,916,634

Scope 2 figure used

Location-based

% change from previous year

0

Direction of change

No change

Reason for change

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	24,866,744	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	67,846	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	117,084	IPCC Fourth Assessment Report (AR4 - 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	26.7	887.1	1.77	59,882	Scope 1 Gas Operations and Scope 1 SF6 from Distribution Operations
Combustion (Electric utilities)	24,869,069	2,714		24,973,621	Scope 1 Gross MWh and Small Plant Stationary
Combustion (Gas utilities)					
Combustion (Other)					
Emissions not elsewhere classified				30,667	Plant Mobile Equipment and Fleet Vehicles. 2020 total gross global Scope 1 emissions reported here do not reflect an additional 20,014 metric tonnes attributed to WPD, which was sold on June 14, 2021.

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	25,016,103

C7.3

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

By business division

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
PPL Electric	13,192
LG&E and KU	25,047,911

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

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

	Gross Scope 1 emissions, metric tons CO2e	Comment
Electric utility activities	24,993,443	Gross Scope 1: Emissions associated with gross MWh's (includes CO2, N2O and CH4), emissions from small plant stationary fuel combustion sources not included in stack emissions, and emissions from plant mobile equipment and LG&E and KU fleet vehicles.

C7.9

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

Decreased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption				

Other emissions reduction activities	54,058	Decreased	0.2	SF6 reduction initiatives 2020 Scope 1 SF6 carbon emissions reported here do not reflect an additional 9,005 metric tonnes attributed to WPD, which was sold on June 14, 2021. Previous years data have not been adjusted to reflect the sale of our U.K. business.
Divestment				
Acquisitions				
Mergers				
Change in output	1,769,252	Decreased	6.44	Emissions reduction from output include EW Brown coal plant retirements.
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 0% but less than or equal to 5%

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)	0	218,236	218,236
Consumption of purchased or acquired electricity		12,066	68,371	80,437
Consumption of self-generated non-fuel renewable energy		3,908		3,908
Total energy consumption		15,974	286,697	302,671

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	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

88,787

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

Emission factor

0.18112

Unit

kg CO2e per gallon

Emissions factor source

EPA Emission Factors

Comment

Calculated for combined cycle plant and gas use in buildings.

Fuels (excluding feedstocks)

Biodiesel

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
72,591

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

Emission factor
10.21

Unit
kg CO2e per gallon

Emissions factor source
EPA Emission Factors

Comment
EPA emission factors for diesel stated. Biodiesel conversion factor is similar.

Fuels (excluding feedstocks)
Petrol

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
56,947

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

Emission factor
7.98

Unit
kg CO2e per gallon

Emissions factor source
EPA Emission Factors

Comment
EPA emission factors used. Discounted by 10% to include ethanol content.

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)

4,715

Gross electricity generation (GWh)

26,358

Net electricity generation (GWh)

24,039

Absolute scope 1 emissions (metric tons CO2e)

22,863,252

Scope 1 emissions intensity (metric tons CO2e per GWh)

951.09

Comment

Total CO2e associated with gross generation divided by net generation. Net generation data excludes purchased power.

Net summer rating used for generation capacity consistent with SEC reporting (10-K).

Lignite

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Oil

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Gas

Nameplate capacity (MW)

2,742

Gross electricity generation (GWh)

5,509

Net electricity generation (GWh)

5,370

Absolute scope 1 emissions (metric tons CO2e)

2,188,617

Scope 1 emissions intensity (metric tons CO2e per GWh)

407.56

Comment

Net summer rating used for generation capacity consistent with SEC reporting (10-K).

Biomass

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Waste (non-biomass)

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Nuclear

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Fossil-fuel plants fitted with CCS

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Geothermal

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Hydropower

Nameplate capacity (MW)

96

Gross electricity generation (GWh)

371

Net electricity generation (GWh)

367

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Net summer rating used for generation capacity consistent with SEC reporting (10-K).

Wind

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Solar

Nameplate capacity (MW)

8

Gross electricity generation (GWh)

18

Net electricity generation (GWh)

18

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

In addition to installed capacity reported here, in 2020, Safari Energy, LLC acquired solar generation with a nameplate capacity of 93.398 MW (AC), which produced 98,850 MWh. Total installed nameplate capacity (inclusive of 2020 acquired capacity) was 110.927 MW (AC), which produced 122,351 MWh.

Marine

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Other renewable

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Other non-renewable

Nameplate capacity (MW)

Gross electricity generation (GWh)

2

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Petroleum – Scope 1 CO2e is captured in the coal number above.

Total

Nameplate capacity (MW)

7,561

Gross electricity generation (GWh)

32,258

Net electricity generation (GWh)
29,794

Absolute scope 1 emissions (metric tons CO2e)
25,051,869

Scope 1 emissions intensity (metric tons CO2e per GWh)
840.84

Comment

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)
65,024

Annual energy losses (% of annual load)
5

Scope where emissions from energy losses are accounted for
Scope 2 (market-based)

Emissions from energy losses (metric tons CO2e)
0

Length of network (km)
17,491

Number of connections
129

Area covered (km2)
50,246

Comment

Defined as voltage exceeding 69 kV.

This includes L&GE and KU's location-based transmission as well as market-based transmission and distribution for PPL Electric and L&GE and KU.

Average line loss is 5% across the system is from emissions associated with owned net generation and purchased power. Line loss emissions are not reported separately.

Country/Region

United States of America

Voltage level

Distribution (low voltage)

Annual load (GWh)

65,024

Annual energy losses (% of annual load)

5

Scope where emissions from energy losses are accounted for

Scope 2 (market-based)

Emissions from energy losses (metric tons CO2e)

0

Length of network (km)

109,909

Number of connections

2,451,354

Area covered (km2)

50,246

Comment

Defined as voltage not exceeding 69 kV.

This includes L&GE and KU's location-based transmission as well as market-based transmission and distribution for PPL Electric and L&GE and KU.

Average line loss is 5% across the system is from emissions associated with owned net generation and purchased power. Line loss emissions are not reported separately

C9. Additional metrics

C9.1

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

C-EU9.5a

(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment
Solar	144,500,000	100	2020	Percentage is for Safari Energy alone. Safari Energy is planning to design, engineer, install, own, and operate solar facilities at customer facilities across the United States.
Coal – hard	961,842,015	81.45	2025	Percentage is for LG&E and KU alone and covers LG&E and KU 2021 - 2025 CAPEX.
Gas	188,381,217	15.95	2025	Percentage is for LG&E and KU alone and covers LG&E and KU 2021 – 2025 CAPEX.
Hydropower	25,129,498	2.13	2025	Percentage is for LG&E and KU alone and covers LG&E and KU 2021 - 2025 CAPEX.
Solar	5,506,001	0.47	2025	Percentage is for LG&E and KU alone and covers LG&E and KU 2021 - 2025 CAPEX: Design, Engineering, Construction of solar facilities for the Companies' subscription-based Solar Share program (Solar facilities expected to be built based on customer demand, for utilities' residential and business customers interested in receiving solar energy credits generated from the facility).

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
Distributed generation	PPL Electric: Working with multiple research partners on the Keystone Solar Future Project to integrate and manage distributed energy resources (DER) like solar systems onto the electrical system. The project created a fully automated renewable interconnection portal for customers to apply for DERs, provides state of the art inverter(s) to use and establishes communication to DERs through its innovative Distributed Energy Resource Management System (DERMS).	21,065,087	3.3	2025
Smart grid	PPL Electric: The work associated with the development and installation of Smart Grid work will provide both reliability/operations benefits and CO2 reductions by eliminating a significant number of truck miles/traffic each day. This is done through system automation (i.e., remote switching and sectionalizing) and by using remote sensing (e.g., battery and transformer monitoring) to eliminate routine field inspections that were previously performed by field workers driving to each location. This remote sensing will also allow for better predictive maintenance through analytics that will also further extend the useful life of these assets and avoid indirect CO2 emissions from purchase of new assets.	61,349,648	9.7	2025

Other, please specify Gas Circuit Breaker Replacement	PPL Electric: The Gas Circuit Breaker (GCB) replacement strategy helps to improve the reliability of the Transmission system and reduces the use of greenhouse gases in PPL equipment as well as the inadvertent loss of greenhouse gases into the atmosphere. For all voltage classes with the available technology, PPL Electric is at the implementation stage of installing Vacuum Circuit Breakers to replace existing Gas Circuit Breakers, which use SF6 gas as the insulating medium. This shift in strategy will reduce the total pounds of SF6 gas on the PPL system, and in effect reduce the relative incidence of SF6 leaks from that equipment. The strategy also uses Circuit Breaker Monitoring technology coupled with data analytics to predict which GCBs are at the highest risk for SF6 leaks to allow proactive maintenance or replacement of those assets.	75,532,000	12	2025
Other, please specify Facilities Efficiency Programs	PPL Electric: Facilities Efficiency Programs are designed to optimize energy efficiency and resource utilization at the various buildings maintained for PPL Electric. This includes the installation of solar panels at certain service centers, the use of remanufactured furniture to divert usable material from landfills and preserve natural resources, and installation of energy efficient components for Facilities projects, such as HVAC equipment, insulation, windows, and converting all lighting to LED.	17,332,000	2.8	2025
Other, please specify Motor operated load break air break	PPL Electric: Investment in remote section devices (motor operated load break air breaks) to reduce truck miles traveled.	23,400,000	3.7	2025

Other, please specify Fleet Electrification	PPL Electric: PPL Electric is spending 10% of its Transportation Capital Vehicle budget each year on electrification. The fleet currently includes hybrid and electric cars and SUVs, with electric pickup trucks under consideration. Additionally, PPL Electric utilizes bucket trucks with electric lifts, which allow the truck's engine to be turned off during use, significantly reducing fuel consumption. PPL Electric has partnered with vendors to identify additional opportunities to include more electric technology into the fleet.	5,000,000	0.8	2025
Smart grid	LG&E and KU: Meters and related system elements that communicate energy usage information to a utility and its customers in ways that allow customers to manage their energy usage and provide the utility with more dynamic information to use in managing the electric system; and Grid-management technologies such as communication networks and intelligent controls that enable utilities to operate more reliably and efficiently the electric system while providing more visibility and security for system operators.	426,052,652	67.7	2025

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	PPL is investing in research and development to deliver clean, reliable and affordable energy to our customers. PPL's operating utilities participate in a variety of research and development

		activities throughout the year, including company research, industry-wide studies and partnerships with educational institutions and research organizations. PPL is an anchor company in the Electric Power Research Institute and Gas Technology Institute's five-year Low Carbon Resources Initiative (LCRI) to accelerate the development and demonstration of low-carbon energy technologies necessary to achieve a net-zero economy. PPL's President and CEO chairs the LCRI Board-level working group. In 2021, PPL announced an investment in Energy Impact Partners' Elevate Fund to support diverse companies conducting innovative research and development in clean energy technologies., part of a broader $50 million dollar commitment of clean technology investments through this purpose-driven platform. Additionally, in 2020, our research and development activities included: • PPL Electric partnered with the Electric Power Research Institute on research related to energy storage, distribution systems, integration of distributed energy resources, low-carbon options to balance electricity supply and demand, and electrification. • PPL Electric continued the Keystone Solar Project in partnership with Drexel University to model the effects of distributed energy on the grid. • PPL Electric supports collective industry research spearheaded by the National Electric Energy Testing, Research and Application Center including reliability analysis, power cable system design and distribution system standards. • LG&E and KU continue operating Kentucky's first and largest utility-scale energy storage system in partnership with the Electric Power Research Institute. The lithium-ion battery energy storage demonstration facility, co-located with the E.W. Brown Solar Plant, provides real-world performance data and allows the company to explore how batteries can improve the inherent intermittency of solar power. • LG&E and KU are modeling the financial and reliability impact of adding varying amounts of intermittent solar and wind generation on our network to ensure the company is prepared to accommodate future deployments of renewable generation.

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	Comment

			year (optional)	
Other, please specify Difficult to Electrify End-Use decarbonization and zero emission electricity generation	Basic academic/theoretical research	≤20%	603,079	PPL Company Wide EPRI Low Carbon Resource Initiative: PPL is an anchor member of EPRI Low Carbon Resources Initiative that promotes advancements in low-carbon electric generation technologies and low-carbon energy carrier (multi-year financial commitment included). The initiative will provide a centralized, collaborative platform to identify and accelerate development of promising technologies from around the world, to demonstrate and assess the performance of selected key technologies and processes and identify possible improvements, and to inform key stakeholders and the public about technology pathways and options.
Energy storage	Pilot demonstration	≤20%		LG&E and KU Battery Storage Demonstration: The companies invested $2,500,000 in 2016 for this battery storage system. No capital investment was made during the reporting year. LG&E and KU operates Kentucky's first and largest utility scale battery—a 1 MW, 2 MWh lithium-ion battery located at the E.W. Brown Generating Station. The battery energy storage system includes over 300

				modules distributed across two shipping containers, a 1 MVA bidirectional inverter for charge/discharge operations, and a 3-phase transformer for grid connectivity. The 10 MW solar photovoltaic (PV) plant co-located with the battery allows LG&E and KU to explore how the systems can operate together. To do this, the Technology Research and Analysis department varies the operating mode of the battery between smoothing the intermittent output power from the solar plant, charging during periods of high solar generation, and discharging at times of peak load to reduce the demand on conventional generators. Beyond solar plant support, the battery system can also provide voltage support, reactive power support, and frequency regulation. This facility also includes a programmable 1 MVA load bank for simulating various grid conditions and to analyze how the battery system will respond to a variety of operational scenarios. The battery is a critical tool for understanding how intermittent renewable generation best fits into the company's generation portfolio and how batteries

				can improve site performance and reliability.

C10. Verification

C10.1

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

	Verification/assurance status
Scope 1	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

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, but we anticipate being regulated in the next three years

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

PPL is in the process of seeking regulatory approval to acquire Rhode Island's primary electric and gas utility, The Narragansett Electric Company. Rhode Island's decarbonization initiatives include goals to achieve 100% renewable energy by 2030 and net-zero carbon emissions by 2050. Upon approval of the transaction, a portion of PPL's operations Rhode Island will fall under RGGI jurisdiction.

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

Other, please specify

Used in LG&E and KU's integrated resource planning (IRP) process

GHG Scope

Scope 1

Application

Applicable to LG&E and KU operating companies.

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

17

Variance of price(s) used

LG&E and KU's IRP 2018 reflects a carbon price of $17 - $26 per ton beginning in 2026.

Type of internal carbon price

Shadow price

Impact & implication

LG&E and KU evaluate long-term resource planning through the company's IRP. Carbon price is an input to this resource planning.

C12. Engagement

C12.1

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

Yes, our suppliers

Yes, our customers

C12.1a

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

Type of engagement

Compliance & onboarding

Details of engagement

Other, please specify

Suppliers must meet 18% renewables

% of suppliers by number

12.5

% total procurement spend (direct and indirect)

34

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

Rationale for the coverage of your engagement

Every energy supplier to PPL Electric is required to fulfill their portion of the Alternative Energy Portfolio Standards obligation.

Impact of engagement, including measures of success

Success is measured by confirming that the total number of credits transferred through the PJM electronic transfer system is commensurate with PPL Electric's Alternative Energy Portfolio (AEPS) Standards obligation.

Comment

From June 2019 to May 2020, alternative power sources comprised at least 15.7% of the power PPL Electric bought for customers who had not chosen a competitive supplier. The projected renewable energy obligation for June 2020 through May 2021 is 18%.

PPL Electric required all energy suppliers to meet these AEPS requirements. Procurement spend on energy contracts for PPL Electric during calendar year 2020 was $465 million.

C12.1b

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

Type of engagement

Education/information sharing

Details of engagement

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

% of customers by number

100

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

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

PPL's operating utilities in Pennsylvania and Kentucky provide programs open to all customers to help them reduce their own energy consumption and to increase awareness among all stakeholders regarding PPL's sustainability efforts, carbon goals and energy efficiency programs. Engagement across all levels of customer class – from residential to industrial – ensures all customers have the information they need regarding energy efficiency, PPL's carbon goals and how we can help customers achieve their own sustainability goals. The scope of the engagement is broad and includes a variety of rebate programs, energy efficiency workshops, video and social media profiles highlighting customers' energy savings and in-school curricula that teach students the importance of energy, natural resources and environmental issues. In addition to direct customer engagement programs, the companies also conduct community outreach programs such as tree planting programs, sponsorships of environmental programs with community partners and collaboration with industry and academic partners.

Impact of engagement, including measures of success

The programs are all facilitated by individual operating companies and success is measured in various ways for each program including but not limited to tracking of rebates for appliance installations and tracking participation in auditing and behavioral programs.

For customers engaged in formal energy saving programs such as demand response programs, concrete energy savings are a clear measure of success. Energy efficiency programs across PPL's utilities helped customers save more than 307,000 megawatt-hours of electricity and reduced peak demand by more than 142 megawatts across our business.

In addition to helping customers reduce their own energy consumption, engagement helps increase awareness among all stakeholders regarding PPL's sustainability efforts, carbon goals and energy efficiency programs.

Type of engagement

Collaboration & innovation

Details of engagement

Other, please specify

LG&E and KU collaborates on renewable energy projects, some of which are combined with energy storage. Installations of EV infrastructure supports clean mobility options. The company also provides a number of renewable energy options for customers.

% of customers by number

100

% 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

LG&E and KU offer a Green Tariff to support the growth of renewable energy and economic development in Kentucky. New or existing businesses can choose from several options to meet their renewable energy goals, including purchasing renewable energy certificates through the Green Energy Program, building a solar array or purchasing solar, hydro or wind power through the utility's renewable power agreement.

The utility implemented a Renewable Power Agreement for customers interested in purchasing renewable power.

LG&E and KU's Solar Share program gives residential, business and industrial customers the opportunity to share in local solar energy and receive credits on their monthly bills. Four of the eight 500-kilowatt sections of LG&E and KU's Solar Share Program are fully subscribed, the fifth array is nearly complete and the company is currently accepting applications for a sixth section. Among the customers taking advantage of the renewable energy installation are the Ford Motor Company, which was the first major founding partner in the program.

Impact of engagement, including measures of success

As a result of the Renewable Power Agreement, Toyota Motor Manufacturing, which operates the world's largest Toyota manufacturing facility in Kentucky, and Dow Silicones Corporation are the first companies to partner with LG&E and KU, making a 20-year commitment. The utilities will supply Toyota with 50% of the 100 MW solar facility's energy output — Dow with 25%, and the remaining 25% will be used to serve the utilities' electric customers. Rhudes Creek Solar facility by ibV Energy Partners has been chosen to provide up to 200 megawatts of renewable energy. The solar facility is expected to be completed and commercially available in 2023.

Four 500-kilowatt sections of LG&E and KU's Solar Share Program are fully subscribed and the company is currently accepting applications for a fifth section. Among the customers taking advantage of the renewable energy installation are the Ford Motor Company, which was the first major founding partner in the program.

Type of engagement

Education/information sharing

Details of engagement

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

% of customers by number

100

% 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

This program is meant to inform all customers of PPL Electric of the company's advanced Distributed Energy Resource Management System designed to manage solar, wind and other renewable power coming onto the grid. The system will help the company ensure good power quality and reliability and keep the grid running smoothly. Moving forward, it will also help PPL Electric better integrate more distributed energy resources like private solar, while preserving network reliability and power quality.

Additionally, the program informs customers that the utility has made it easier for customers to apply to connect solar panels and other generation systems to the grid through a user-friendly Renewable Energy Connection website.

Impact of engagement, including measures of success

As of December 2020, PPL Electric has connected more than 235.5 megawatts of renewable energy to the grid through the program.

Type of engagement

Collaboration & innovation

Details of engagement

Other, please specify

Safari Energy, PPL's renewable energy development company, develops and operates solar energy facilities for customers throughout the United States.

% of customers by number

100

% 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

The customer percentage is for Safari Energy alone. Across the U.S., PPL's renewable energy development company, Safari Energy has developed or acquired more than 500 commercial scale solar projects since 2008. Safari Energy works with commercial and industrial customers to develop custom, turnkey renewable energy and storage projects.

Safari Energy also works with clients to integrate battery storage with solar power systems to reduce a facility's peak demand and optimize demand throughout the day.

Impact of engagement, including measures of success

Projects span 24 states and Washington, D.C., generating approximately 618,942 megawatt hours of electricity, or the equivalent of avoiding more than 437,000 metric tons of CO2.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers
Trade associations
Funding research organizations
Other

C12.3a

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

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Adaptation or resilience	Support	Monitoring policy discussions regarding grid resilience and fuel diversity and advocating for recognition that resilience of the bulk power system is a growing issue of policy focus due to the critical importance of the energy sector for national and economic security.	There is no single legislative solution addressing this issue. It is woven into a variety of legislative and regulatory proposals. Any legislation should include a definition of resilience that values robust transmission and reliable energy supply, including 24/7 generation resources. Support policies that preserve flexibility of local solutions to optimize utilities' own resource portfolios.
Adaptation or resilience	Support	Advocating for legislative and policy approaches that streamline and reduce the complexity, cost and time involved in licensing, permitting and review processes for infrastructure projects.	No specific legislation yet proposed. Any legislative solution should create a more efficient and predictable permitting process for large infrastructure projects and a more transparent and accountable regulatory system that promotes economic development while maintaining necessary safety, environmental and public health protection. Improved cooperation among jurisdictions is needed in order to facilitate siting and construction of transmission infrastructure.

Clean energy generation	Support with major exceptions	Generally supporting state-level initiatives for electrification and DER expansion, including deployment of electric vehicles, charging infrastructure and national electric vehicle corridors, and enabling solar distributed energy resources. Specific advocacy efforts with exceptions in Pennsylvania to allow for expanded utility engagement in both areas. Supporting community solar proposals in Pennsylvania that do not impose significant administrative burdens on utilities. Supporting electrification of building sector provided customers maintain choice of technology.	Pennsylvania legislation should provide for utility ownership of electric vehicle infrastructure and utility management of community solar programs for low-income customers. Kentucky supports legislative efforts to prevent local governments from limiting customers heating options.
Clean energy generation	Support	Net metering - Advocating for compensation structures for private distributed energy resources that are fair to all customers.	Allow state regulatory commissions to determine the value of excess energy generated by future net-metering customers. Support efforts to reform net-metering laws to compensate excess generation fairly, minimize shifting private generation costs to other consumers and ensure that all customers are contributing fairly to the fixed cost of the energy grid.
Clean energy generation	Support	Production and investment tax credits for energy storage and energy storage technologies – Advocating for the same tax credits for energy storage as are currently available for solar and other technologies.	PPL supports extension of the existing renewable energy tax credits and supports expanding the credits to include energy storage technologies. PPL supports legislation to move towards technology neutral tax credits for the installation of new storage and non-emitting generation.
Cap and trade	Undecided	Monitoring climate legislation and policy discussions at federal and state level. There are various federal legislative proposals in different stages of development. In Pennsylvania, legislative discussions are centered around joining a regional cap-and-trade	To be the most effective in producing lasting carbon reductions, PPL believes that legislation should be economy-wide, market-based, and provide for regional flexibility. PPL supports a federal carbon rule that is based on “inside the fence”

		scheme (RGGI). The company will not take a position on any U.S. federal or state legislation until more details are available and company impacts can be evaluated.	or unit-specific reductions that are demonstrated to be achievable. Any federal legislation that establishes a zero-emissions electric sector by 2035 should, at a minimum, include appropriate cost containment measures and off-ramps to provide time for the development of new carbon-free generation and storage technologies.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

Edison Electric Institute (EEI)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

With respect to climate, EEI's policy priorities include:

• Increasing funding, from research through deployment, for a range of clean energy technologies;
• Revamping energy tax credits to advance newer technologies in a technology-neutral manner;
• Enabling the siting, permitting, and construction of new technologies and grid infrastructure; and
• Utilizing electric sector emission reductions to reduce emissions in other sectors.

EEI believes that to be effective and efficient, any climate change legislation must be consistent with current technology, be economy-wide in scope and allow for full flexibility in market-based mechanisms, while maintaining reliability and customer affordability.

https://www.eei.org/issuesandpolicy/Pages/CleanEnergy.aspx

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

The full EEI Board sets the association's federal and state policy through a consensus process, and no position is taken if consensus is not reached. PPL's President and CEO is on the EEI Board and is actively engaged in the development and refinement of EEI's position on climate change. CEO Policy Committees and Task Forces, comprised of company CEOs, Presidents and COOs, oversee EEI public policy development and implementation. These policy committees are informed by Executive Advisory Committees (EACs), which provide direction and expertise to their respective CEO Policy Committees. PPL is represented on all key EACs, whose members generally are member company officers.

PPL's VP-Public Affairs and Sustainability co-chairs EEI's sustainability workgroup. PPL's VP-Federal Government Relations is on the Federal Affairs Executive Advisory Committee.

Trade association

American Gas Association (AGA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

AGA is committed to reducing greenhouse gas emissions through smart innovation, new and modernized infrastructure, and advanced technologies that maintain reliable, resilient and affordable energy service choices for customers, AGA has adopted eight principles for policy action, key among them is that all sectors of the economy should contribute to reductions; the potential benefits of natural gas and natural gas infrastructure to effectively reduce emissions and improve energy efficiency should be recognized; the option of natural gas for consumers, should be preserved; and the government should increase its investments into the RD&D of advanced gas and mitigation technologies (including carbon capture utilization and sequestration) The full list of AGA policy principles, and ten commitments made by AGA and its member companies can be found at:

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

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

The AGA Board annually sets the association's advocacy priorities and adjusts them as needed throughout the year. LG&E and KU's Chief Operations Officer is a member of the AGA Board and provides regular input on policy positions. Recommendations for these advocacy priorities come from AGA Board Committees and Task Forces as well as committees of AGA members (e.g., Operations, Legislative Affairs, State Affairs, Legal, etc.), outlined in AGA's Committee Scope book.

Trade association

Energy Storage Association (ESA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

ESA advocates and advances the energy storage industry to fulfill its vision of 100 GW of energy storage growth by 2030. ESA's policy positions aim to increase revenues available to storage, ensure grid and market access, and enhance storage's competitiveness by including it in planning processes.

https://energystorage.org/policies-issues/

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

The ESA Leadership Circle (LC) guides the association's federal, wholesale market, and state, setting ESA's agenda and developing positions in specific policy engagements. PPL's Vice President Renewable Energy Solutions serves as an LC member. ESA takes positions even when there is not consensus, based on the predominance of agreement among LC members and consistency with ESA's mission and vision; however, on particularly controversial topics, ESA may take a majority vote of the LC members to determine a position or choose to take no position.

Trade association

Kentucky Chamber

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The chamber's advocacy positions are generally focused on issues of general business climate and competitiveness.

https://www.kychamber.com/sites/default/files/pdfs/2021%20Kentucky%20Chamber%20Legislative%20Agenda.pd

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

LG&E and KU are represented on all relevant Public Policy Councils, and LG&E and KU's President and CEO is a member of the KY Chamber's Board of Directors. Before taking a position on a state policy, regulation or proposed legislation, the KY Chamber works through its staff to develop a position with assistance from its six Public Policy Councils and Small Business Committee. These Councils/Committees make policy and position recommendations to the KY Chamber's Board, which the Board can then review, modify, adopt or ratify. The policies usually provide a clear direction on positions; however, a Board vote is sometimes needed if there is not clear direction or if there is a split or a lack of consensus. Generally, if KY Chamber members cannot reach consensus on an issue, the Chamber does not take a position.

Trade association

Kentucky Coal Association (KCA)

Is your position on climate change consistent with theirs?

Mixed

Please explain the trade association's position

The mission of the Kentucky Coal Association is to provide effective leadership for the coal industry and to enhance the ability of the Kentucky coal industry to compete in domestic and international coal markets.

http://www.kentuckycoal.org/our-mission/

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

LG&E and KU are members of the KCA, though no employees are on its Board or Executive Committee. When KCA's policy positions related to clean energy transition do not align with LG&E and KU's, LG&E and KU notifies KCA and freely advocates against the position at issue.

Trade association

Pennsylvania Chamber

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The purpose of the PA Chamber is to create an environment in which businesses want to operate in a state that allows them to thrive and grow. As such, the chamber's advocacy positions are generally focused on issues of competitiveness. With respect to environment and climate issues generally, the chamber believes that economic development and environmental protection are not mutually exclusive objectives and advocates for thoughtful, science-based development and flexible implementation of environmental law.

https://www.pachamber.org/advocacy/

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

The Pennsylvania Chamber's Policy Roundtable makes recommendations on changes to the Chamber's policies, which the Board can review, modify, adopt or ratify. The polices are reviewed every three years. The Board may vote on a regulatory or legislative issue if there is a lack of clear policy direction or if a consensus position cannot be reached. PPL is represented on committees relevant to its business interests. PPL's VP-Public Affairs and Sustainability serves on the Chamber Board. If PPL is not in agreement with the final position of the Pennsylvania Chamber, that difference would be provided to the full Board either in writing or verbally at a Chamber Board meeting.

Trade association

Energy Association of Pennsylvania (EAP)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Energy Association of Pennsylvania (EAP) is a trade association that represents and promotes the interests of regulated electric and natural gas distribution companies operating in Pennsylvania. To date, the association has not adopted a position directly related to climate change policy. EAP communicates industry positions and input on matters such as renewable portfolio standards and energy efficiency with a focus on reliability, affordability and safety.

https://www.energypa.org/who-we-are/

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

Before taking a position on a state policy, regulation or proposed legislation, the EAP works through either its Regulatory Committee or its Legislative Committee to develop a consensus. General policy issues are discussed with the Board; however, as a general rule, EAP only agrees to develop a position on a policy, regulation or proposed legislation if there is a consensus among its members. PPL Electric's President serves on the EAP Board.

Trade association

Electric Power Research Institute (EPRI)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

EPRI provides thought leadership, industry expertise, and collaborative value to help the electricity sector identify issues, technology gaps, and broader needs that can be addressed through effective research and development programs. EPRI focuses on electricity generation, delivery, and use in collaboration with the electricity sector and its stakeholders. Of particular focus, EPRI's Low-Carbon Resource Initiative is focusing on the need to accelerate development and demonstration of low- and zero-carbon energy technologies.

https://www.epri.com/about

This organization is not engaged in advocacy. PPL uses the research to inform policy makers and other stakeholders.

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

PPL is a founding sponsor of the LCRI, and our CEO is a member of the Electric Power Research Initiative Board and chair of the Low-Carbon Research Initiative Board

Working Group, helping to identify the research priorities of the organization. Company executives have participated in several EPRI's research and ESG initiatives.

Trade association

Smart Electric Power Alliance (SEPA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

SEPA envisions a carbon-free energy system by 2050 and works to assist electric power stakeholders address the most pressing issues they encounter as they pursue the transition to a clean energy future. It provides education, research, standards, and collaboration to help utilities and others across three pathways: electrification, grid integration, and regulatory and business innovation.

https://sepapower.org/about/

This organization is not engaged in advocacy. PPL uses the research to inform policy makers and other stakeholders.

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

As a member, PPL Electric is actively engaged on several fronts, especially with respect to grid integration. PPL Electric was named the 2019 SEPA Power Players Investor-Owned Utility of the Year, in recognition of the company's comprehensive plan and strategy to prepare for the future by creating the next generation of advanced distribution management system functionalities through its Distributed Energy Resource Management System (DERMS).

Trade association

National Association for Environmental, Health, Safety and Sustainability Management (NAEM)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

NAEM's mission is to empower corporate leaders to advance environmental stewardship, create safe and healthy workplaces, and promote global sustainability by providing benchmarking, networking and professional development opportunities.

https://www.naem.org/our-community/mission

This organization is not engaged in advocacy. PPL uses the research, benchmarking and other services to improve internal sustainability practices and inform policy makers and other stakeholders.

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

PPL Electric is an active member of NAEM.

Trade association

Solar Energy Industries Association (SEIA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

SEIA is the national trade association for the solar and solar+storage industries and is working to create the framework for solar to achieve 20% of U.S. electricity generation by 2030. Its advocacy focuses on policies that promote reliable, low-cost solar power and market rules that establish fair competition.

https://www.seia.org/initiatives/solar-policyHi

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

Safari Energy is an active member of SEIA.

Trade association

New York Solar Industries Association (NYSEIA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

NYSEIA works to achieve significant, long-term, and sustainable growth of solar energy for New York State. Its efforts include educating stakeholders on the environmental economic development, and energy-supply benefits of solar energy use, and participating in public policy and regulatory proceedings affecting the solar industry.

https://49da7a77-7db8-45c2-8f29-58137f5c5afe.filesusr.com/ugd/a89dc9_8f56f65a2cf14c188f5553d2fbfaeb36.pdf

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

Safari Energy is an active member of NYSEIA.

C12.3d

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

Yes

C12.3e

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

Participant in trial programs to support low-carbon research and demonstration

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

All direct and indirect activities that influence policy are directed by, or communicated to, PPL's Vice President-Public Affairs and Sustainability and coordinated with external affairs/government relations across the enterprise to ensure proper alignment of significant policy-related activities and consistency with the company's energy transition and climate strategy, and views on energy and environmental policies. The Vice President-Public Affairs and Sustainability engages the Corporate Sustainability Committee, as a whole or with specific members of the committee, as necessary (e.g., Global Chief Compliance Officer, Legal). Information is reviewed with the Corporate Leadership Council as appropriate. PPL's Board of Directors is apprised of significant legislative and policy issues and company positions annually, and additionally, as needed. In addition, corporate leadership and the board receive a report of corporate political contributions and trade association memberships, which are discussed with the GNC and also made available on PPL's corporate website. These process and controls which extend across the enterprise, have been implemented by Public Affairs with collaboration from Compliance and Legal.

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 voluntary sustainability report

Status

Complete

Attach the document

PPL-2020-Corporate-Sustainability-Report.pdf

Page/Section reference

Pages: 4, 7-8, 12-24, 25-34, 62-67

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures

Emission targets
Other metrics
Other, please specify
Operational, community, employee, environmental

Comment

PPL's response to climate change and GHG emissions performance are included throughout PPL's 2020 Sustainability Report but are primarily addressed in the following sections: Key Metrics (p. 7): Public Policy Engagement (p. 18); Advance a Cleaner Energy Future (25-34); PPL's Contribution to U.N. Sustainable Development Goals; and Appendix which contains data aligned with GRI indicators.

Publication

In voluntary communications

Status

Complete

Attach the document

Page/Section reference

https://www.pplweb.com/sustainability/climate-action/

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics
Other, please specify
Operational, community, employee, environmental

Comment

In addition to PPL's 2020 Sustainability Report, PPL has a dedicated web page on the company's website to climate action initiatives. The climate action web page addresses the following: PPL's Clean Energy Strategy; Enterprise-wide Climate Goals; Fleet Electrification Goals; and Commitment to R&D.

Publication

Other, please specify
EEI-AGA ESG Report

Status

Complete

Attach the document

PPL_Corp-EEI-AGA-ESG-2019-Report.pdf

Page/Section reference

Pages: 2-4

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics
Other, please specify
Operational, community, employee, environmental

Comment

The EEI-AGA ESG report enables consistent reporting of key metrics for investor-owned utilities. Metrics include climate-related emissions reporting and methane management, as well as a qualitative section that provides an overview of key sustainability-related initiatives and a climate response following the TCFD categories of reporting.

C15. Signoff

C-FI

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

This CDP Climate Change Response (“Response”) contains forward-looking statements regarding, among other things, future energy demand, the availability and cost of natural gas, the market for electric vehicles, the growth of solar and other renewable forms of electricity generation and storage, potential rates of reduction in coal-fired electricity generation in Kentucky, low-carbon technologies, enhancement of the grid, the expected operating life of existing coal-fired electricity generation plants and PPL Corporation’s corporate strategy. These statements, and all others that reflect beliefs, plans, estimates or any other forward-looking information, are “forward-looking statements” within the meaning of the federal securities laws. PPL Corporation believes that the forward-looking statements in this Response reflect reasonable expectations and assumptions. However, it is important to understand that forward-looking statements, and their underlying assumptions, are subject to a wide range of risks and uncertainties, both known and unknown. Any number of factors could cause actual results to be materially different from those discussed in the statements, including: market demand for energy in our service territories; weather or other conditions affecting customer energy usage and operating costs; the effect of any business or industry restructuring; the profitability and liquidity of PPL Corporation and its subsidiaries; operating performance of its facilities; environmental, legal and regulatory requirements and the related costs of compliance;

development of new projects, markets and technologies for the generation and delivery of electricity; performance of new ventures; asset or business acquisitions and dispositions; receipt of necessary government permits, approvals, rate relief and regulatory cost recovery; capital market conditions and decisions regarding capital structure; the outcome of litigation against PPL Corporation and its subsidiaries; the securities and credit ratings of PPL Corporation and its subsidiaries; political, regulatory or economic conditions in states, regions or countries where PPL Corporation or its subsidiaries conduct business; new state, federal or foreign legislation; commitments and liabilities of PPL Corporation and its subsidiaries; and catastrophic events such as fires, earthquakes, explosions, floods, hurricanes and other storms, droughts or other similar occurrences as well as cyber intrusion or other terrorist incidents and their direct or indirect effect on PPL Corporation's businesses and the U.S. electricity grids. All forward-looking statements in this Response should be considered in light of these important factors. Further information on these and other risks and uncertainties is available in PPL Corporation's Form 10-K and other reports on file with the Securities and Exchange Commission.

C15.1

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

	Job title	Corresponding job category
Row 1	Vice President-Public Affairs and Sustainability	Chief Sustainability Officer (CSO)

SC. Supply chain module

SC0.0

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

SC0.1

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

	Annual Revenue
Row 1	

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

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).

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

Please state the main reason why you are declining to respond to your customers

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

Please confirm below

I have read and accept the applicable Terms