

## **PPL Corporation**

# 2024 CDP Corporate Questionnaire 2024

#### Word version

#### Important: this export excludes unanswered questions

This document is an export of your organization's CDP questionnaire response. It contains all data points for questions that are answered or in progress. There may be questions or data points that you have been requested to provide, which are missing from this document because they are currently unanswered. Please note that it is your responsibility to verify that your questionnaire response is complete prior to submission. CDP will not be liable for any failure to do so.

Terms of disclosure for corporate questionnaire 2024 - CDP

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#### C1. Introduction

(1.3) Provide an overview and introduction to your organization.

### (1.3.2) Organization type

Select from:

✓ Publicly traded organization

### (1.3.3) Description of organization

Headquartered in Allentown, Pennsylvania, PPL Corporation (NYSE: PPL) and our family of companies provide essential energy services to over 3.6 million customers. PPL is one of the largest regulated utility holding companies in the United States, with more than 39 billion in total assets. PPL Corporation is comprised of four regulated utility subsidiaries: PPL Electric Utilities Corporation (PPL Electric), Louisville Gas and Electric Company (LG&E), Kentucky Utilities Company (KU), and Rhode Island Energy (RIE). Through our regulated utility subsidiaries, we deliver electricity to customers in Kentucky, Pennsylvania, Rhode Island and Virginia. We also deliver natural gas in Kentucky and Rhode Island and generate power in Kentucky. Sustainability is embedded in the company's strategic framework to thrive in a changing energy landscape. Our vision is to be the best utility in the U.S. as we strive to achieve the ranking of first decile in safety and first quartile in customer satisfaction, reliability and cost efficiency. The company's strategy to create the utilities of the future is focused on advancing the clean energy transition while maintaining reliability and affordability, enhancing the reliability and resiliency of our gas and electric networks, leveraging best practices to drive operational efficiency and long-term value and empower customers through digital solutions and better customer service. Our clean energy transition strategy is centered around the following key areas that we believe will enable us to advance new opportunities for the company and our customers as we help deliver a net-zero economy: decarbonize our generation and non-generation operations, drive digital innovation and R&D to enable new technologies, and position the grid as an enabler for clean energy resources, energy efficiency and demand-side management. Our talented workforce of more than 6,600 employees works every day to deliver on our mission to provide safe, reliable, affordable and sustainable energy to our customers and competitive returns to our shareowners. Our regulated utility companies consistently rank among the best utilities in the U.S. for customer satisfaction and reliability. We are a positive force in the cities and towns where we do business. PPL, its foundations and its employees contributed more than 13.6 million in 2023 to support local organizations through annual grant and charitable giving programs in Kentucky, Pennsylvania and Rhode Island with financial support focused on developing a strong, skilled workforce; revitalizing our communities; enhancing education; and promoting diversity, equity and inclusion [Fixed row]

(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

### (1.4.1) End date of reporting year

(1.4.2) Alignment of this reporting period with your financial reporting period	
Colort from:	

Select from:

Yes

## (1.4.3) Indicate if you are providing emissions data for past reporting years

Select from:

Yes

# (1.4.4) Number of past reporting years you will be providing Scope 1 emissions data for

Select from:

✓ 1 year

## (1.4.5) Number of past reporting years you will be providing Scope 2 emissions data for

Select from:

# (1.4.6) Number of past reporting years you will be providing Scope 3 emissions data for

Select from:

✓ 1 year

[Fixed row]

(1.5) Provide details on your reporting boundary.

		Is your reporting boundary financial statements?	for your CDP disclosure the same as that used in your
		Select from:  ✓ Yes	
[Fixed row]	,		
(1.6) Does your organiza	tion have an ISIN code or another u	nique identifier (e.g	., Ticker, CUSIP, etc.)?
	Does your organization use	this unique identifier?	Provide your unique identifier
Ticker symbol	Select from:  ✓ Yes		PPL
[Add row]			
(1.16.1) For your electric specifics for each techno		tails of your namep	late capacity and electricity generation
Coal - Hard			
(1.16.1.1) Own or contro	ol operations which use this power g	generation source	
Select from: ✓ Yes			

(1.16.1.2) Nameplate capacity (MW)

(1.16.	1.3)	Gross el	<b>lectricity</b>	generation (	(GWh
<b>VI.IO</b>				gonoration	

26256

# (1.16.1.4) Net electricity generation (GWh)

23728

# (1.16.1.5) Comment

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

### Lignite

# (1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ No

Oil

# (1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ No

#### Gas

## (1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ Yes

(1.16.1.2) Nameplate capacity (MW)
2716
(1.16.1.3) Gross electricity generation (GWh)
5503
(1.16.1.4) Net electricity generation (GWh)
5362
(1.16.1.5) Comment
Net summer rating used for generation capacity consistent with SEC reporting (10-K).
Sustainable biomass
(1.16.1.1) Own or control operations which use this power generation source
Select from: ✓ No
Other biomass
(1.16.1.1) Own or control operations which use this power generation source
Select from:  ✓ No
Waste (non-biomass)
(1.16.1.1) Own or control operations which use this power generation source

11

Select from:

☑ No
Nuclear
(1.16.1.1) Own or control operations which use this power generation source
Select from:  ☑ No
Fossil-fuel plants fitted with carbon capture and storage
(1.16.1.1) Own or control operations which use this power generation source
Select from:  ☑ No
Geothermal
(1.16.1.1) Own or control operations which use this power generation source
Select from:  ☑ No
Hydropower
(1.16.1.1) Own or control operations which use this power generation source
Select from:  ☑ Yes
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# (1.16.1.3) Gross electricity generation (GWh) 319 (1.16.1.4) Net electricity generation (GWh) 316 (1.16.1.5) Comment Net summer rating used for generation capacity consistent with SEC reporting (10-K). Wind (1.16.1.1) Own or control operations which use this power generation source Select from: ✓ No Solar (1.16.1.1) Own or control operations which use this power generation source Select from: Yes (1.16.1.2) Nameplate capacity (MW) 8 (1.16.1.3) Gross electricity generation (GWh) 16

(1.16.1.4) Net electricity generation (GWh)

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

#### Marine

## (1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ No

#### Other renewable

# (1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ No

#### Other non-renewable

### (1.16.1.1) Own or control operations which use this power generation source

Select from:

✓ No

#### **Total**

## (1.16.1.2) Nameplate capacity (MW)

7535

## (1.16.1.3) Gross electricity generation (GWh)

## (1.16.1.4) Net electricity generation (GWh)

29425

### (1.16.1.5) Comment

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

### (1.24) Has your organization mapped its value chain?

Value chain mapped	Primary reason for not mapping your upstream value chain or any value chain stages	Explain why your organization has not mapped its upstream value chain or any value chain stages
Select from:  ☑ No, but we plan to do so within the next two years	Select from: ✓ Not an immediate strategic priority	PPL follows federal regulations related to purchasing from restricted countries.

[Fixed row]

# (1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?

## (1.24.1.1) Plastics mapping

Select from:

✓ No, and we do not plan to within the next two years

# (1.24.1.5) Primary reason for not mapping plastics in your value chain

#### Select from:

✓ Not an immediate strategic priority

## (1.24.1.6) Explain why your organization has not mapped plastics in your value chain

PPL has high standards for managing waste from our operations. In keeping with the company's commitment to advance a cleaner energy future and encourage responsible stewardship, we seek innovative solutions and opportunities to reduce, reuse and recycle waste materials. Waste diversion practices are challenged by changing markets in plastics reuse, recycling and diversion solutions.

[Fixed row]

(2.1) How do	es your organization	define short-, medium-	, and long-term time	e horizons in rela <sup>.</sup>	tion to the identification
assessment,	and management of	your environmental dep	pendencies, impacts	s, risks, and oppo	rtunities?

**Short-term** 

(2.1.1) From (years)
0
(2.1.3) To (years)
2
2
Medium-term
(2.1.1) From (years)
3
(2.1.3) To (years)
5
Long-term
(2.1.1) From (years)
6
(2.1.2) Is your long-term time horizon open ended?

Select t	rom:
----------	------

✓ No

# (2.1.3) To (years)

25

## (2.1.4) How this time horizon is linked to strategic and/or financial planning

Integrated Resource Plan (IRP) and T&D planning horizon is typically a 15-year timeframe; climate assessment and CO2e goal are more than 25 years from the date of this response (to 2050). [Fixed row]

# (2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

Process in place	Dependencies and/or impacts evaluated in this process
Select from:  ✓ Yes	Select from:  ☑ Both dependencies and impacts

[Fixed row]

# (2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

Process in place	Risks and/or opportunities evaluated in this process	Is this process informed by the dependencies and/or impacts process?
Select from:  ✓ Yes	Select from:  ☑ Both risks and opportunities	Select from: ✓ Yes

[Fixed row]

# (2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

#### Row 1

### (2.2.2.1) Environmental issue

Select all that apply

- ✓ Climate change
- Water

# (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- ✓ Dependencies
- ✓ Impacts
- Risks
- Opportunities

## (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

## (2.2.2.4) Coverage

Select from:

✓ Full

## (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

✓ Every three years or more

## (2.2.2.9) Time horizons covered

Select all that apply

✓ Long-term

### (2.2.2.10) Integration of risk management process

Select from:

✓ Integrated into multi-disciplinary organization-wide risk management process

# (2.2.2.11) Location-specificity used

Select all that apply

✓ Sub-national

# (2.2.2.12) Tools and methods used

#### **Enterprise Risk Management**

☑ Enterprise Risk Management

## (2.2.2.13) Risk types and criteria considered

#### **Acute physical**

- Drought
- Tornado
- ✓ Wildfires
- ✓ Heat waves
- ✓ Cold wave/frost
- ✓ Other acute physical risk, please specify :High winds

#### **Chronic physical**

- ✓ Heat stress
- ✓ Soil erosion
- ✓ Water stress
- ☑ Change in land-use
- Changing wind patterns

#### **Policy**

- ✓ Carbon pricing mechanisms
- ☑ Changes to national legislation
- ☑ Regulation of discharge quality/volumes
- ✓ Increased difficulty in obtaining operations permits
- ☑ Lack of mature certification and sustainability standards

#### Market

- ☑ Availability and/or increased cost of raw materials
- ☑ Changing customer behavior
- ✓ Uncertainty in the market signals

- ✓ Pollution incident
- ✓ Heavy precipitation (rain, hail, snow/ice)
- ☑ Flood (coastal, fluvial, pluvial, ground water)
- ✓ Storm (including blizzards, dust, and sandstorms)
- ✓ Temperature variability
- ✓ Poorly managed sanitation
- ✓ Increased severity of extreme weather events
- ☑ Changing temperature (air, freshwater, marine water)
- ☑ Changing precipitation patterns and types (rain, hail, snow/ice)
- ✓ Introduction of regulatory standards for previously unregulated contaminants

#### Reputation

- ☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
- ✓ Stigmatization of sector

#### **Technology**

- ✓ Transition to lower emissions technology and products
- ☑ Transition to water efficient and low water intensity technologies and products

#### Liability

- ☑ Exposure to litigation
- ✓ Non-compliance with regulations

## (2.2.2.14) Partners and stakeholders considered

Select all that apply

Customers

Local communities

☑ Employees

✓ Indigenous peoples

- ✓ Investors
- Suppliers
- Regulators

# (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

✓ No

### (2.2.2.16) Further details of process

The company maintains a robust enterprise risk management process that provides a business portfolio view of material risks that may impact achievement of the company's business strategy. As part of the Enterprise Risk Management (ERM) process, representatives from the company's operating companies and service groups identify, assess, monitor and report on ongoing and emerging risks, including climate-related and broader ESG risks. 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 Board GNSC receiving regular sustainability reports with a discussion of key ESG risks and opportunities.

#### Row 2

# (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

# (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- Dependencies
- ✓ Impacts
- ✓ Risks
- Opportunities

## (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

### (2.2.2.4) Coverage

Select from:

Partial

# (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

### (2.2.2.8) Frequency of assessment

Select from:

Annually

### (2.2.2.9) Time horizons covered

Select all that apply

✓ Long-term

### (2.2.2.10) Integration of risk management process

Select from:

✓ Integrated into multi-disciplinary organization-wide risk management process

### (2.2.2.11) Location-specificity used

Select all that apply

✓ Sub-national

### (2.2.2.12) Tools and methods used

#### **Enterprise Risk Management**

✓ Internal company methods

## (2.2.2.13) Risk types and criteria considered

#### **Acute physical**

Drought

Tornado

✓ Wildfires

✓ Heat waves

✓ Cold wave/frost

☑ Cyclones, hurricanes, typhoons

☑ Heavy precipitation (rain, hail, snow/ice)

✓ Flood (coastal, fluvial, pluvial, ground water)

✓ Storm (including blizzards, dust, and sandstorms)

✓ Other acute physical risk, please specify :High winds

#### **Chronic physical**

- ✓ Heat stress
- ✓ Soil erosion
- ✓ Water stress
- ☑ Change in land-use
- Changing wind patterns

#### **Policy**

- ✓ Carbon pricing mechanisms
- ☑ Changes to national legislation
- ✓ Increased difficulty in obtaining operations permits
- ☑ Lack of mature certification and sustainability standards

#### Market

- ✓ Availability and/or increased cost of raw materials
- ☑ Changing customer behavior
- ✓ Uncertainty in the market signals

#### Reputation

- ☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
- ✓ Stigmatization of sector

#### **Technology**

- ☑ Transition to lower emissions technology and products
- ✓ Transition to water intensive, low carbon energy sources
- ✓ Unsuccessful investment in new technologies

#### Liability

- ☑ Exposure to litigation
- ✓ Non-compliance with regulations

- ✓ Temperature variability
- ✓ Increased severity of extreme weather events
- ☑ Changing temperature (air, freshwater, marine water)
- ☑ Changing precipitation patterns and types (rain, hail, snow/ice)

# (2.2.2.14) Partners and stakeholders considered

Select all that apply

Customers

✓ Local communities

Employees

✓ Indigenous peoples

- **✓** Investors
- Suppliers
- Regulators

### (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

✓ No

### (2.2.2.16) Further details 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 Distributed Energy Resources (DERs), including renewable generation and energy storage.

#### Row 3

## (2.2.2.1) Environmental issue

Select all that apply

✓ Climate change

# (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- Dependencies
- ✓ Impacts

- ✓ Risks
- Opportunities

## (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

## (2.2.2.4) Coverage

Select from:

✓ Full

# (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

## (2.2.2.8) Frequency of assessment

Select from:

## (2.2.2.9) Time horizons covered

Select all that apply

✓ Long-term

# (2.2.2.10) Integration of risk management process

Select from:

✓ Integrated into multi-disciplinary organization-wide risk management process

# (2.2.2.11) Location-specificity used

✓ Sub-national

### (2.2.2.12) Tools and methods used

#### International methodologies and standards

✓ IPCC Climate Change Projections

#### Other

✓ Scenario analysis

## (2.2.2.13) Risk types and criteria considered

#### **Acute physical**

- Drought
- ✓ Tornado
- ✓ Wildfires
- ✓ Heat waves
- ✓ Cold wave/frost

#### **Chronic physical**

- ✓ Heat stress
- ✓ Soil erosion
- ✓ Water stress
- ☑ Change in land-use
- ☑ Changing wind patterns

#### **Policy**

- ☑ Carbon pricing mechanisms
- ☑ Changes to national legislation
- ✓ Increased difficulty in obtaining operations permits
- ☑ Lack of mature certification and sustainability standards

- ✓ Cyclones, hurricanes, typhoons
- ✓ Heavy precipitation (rain, hail, snow/ice)
- ✓ Flood (coastal, fluvial, pluvial, ground water)
- ☑ Storm (including blizzards, dust, and sandstorms)
- ✓ Other acute physical risk, please specify :High winds
- ✓ Temperature variability
- ✓ Increased severity of extreme weather events
- ☑ Changing temperature (air, freshwater, marine water)
- ☑ Changing precipitation patterns and types (rain, hail, snow/ice)

#### Market

- ✓ Availability and/or increased cost of raw materials
- ☑ Changing customer behavior
- ✓ Uncertainty in the market signals

#### Reputation

- ☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
- ✓ Stigmatization of sector

#### **Technology**

- ☑ Transition to lower emissions technology and products
- ☑ Transition to water intensive, low carbon energy sources
- ✓ Unsuccessful investment in new technologies

#### Liability

- ☑ Exposure to litigation
- ✓ Non-compliance with regulations

# (2.2.2.14) Partners and stakeholders considered

Select all that apply

Customers

☑ Employees

✓ Investors

✓ Suppliers

Regulators

✓ Local communities

✓ Indigenous peoples

# (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

✓ No

### (2.2.2.16) Further details of process

We have 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 1.5C, and we followed the recommendations of the Task Force on Climate-Related Financial Disclosures.

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 weighted toward electricity transmission and distribution. We believe there will be significant future investment opportunities in our electricity 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 modelling and input from our internal experts and third parties, as needed, and reviewing assessments with senior management and our Board on an ongoing basis.

#### Row 4

### (2.2.2.1) Environmental issue

Select all that apply

Climate change

# (2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

- Dependencies
- ✓ Impacts
- Risks
- Opportunities

### (2.2.2.3) Value chain stages covered

Select all that apply

✓ Direct operations

### (2.2.2.4) Coverage

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✓ Full

## (2.2.2.7) Type of assessment

Select from:

✓ Qualitative and quantitative

# (2.2.2.8) Frequency of assessment

Select from:

# (2.2.2.9) Time horizons covered

Select all that apply

✓ Long-term

# (2.2.2.10) Integration of risk management process

Select from:

✓ Integrated into multi-disciplinary organization-wide risk management process

# (2.2.2.11) Location-specificity used

Select all that apply

✓ Sub-national

# (2.2.2.12) Tools and methods used

#### **Enterprise Risk Management**

✓ Internal company methods

#### Other

✓ Scenario analysis

### (2.2.2.13) Risk types and criteria considered

#### **Acute physical**

- Drought
- ✓ Tornado
- Wildfires
- ✓ Heat waves
- ✓ Cold wave/frost

#### **Chronic physical**

- ✓ Heat stress
- ✓ Soil erosion
- ✓ Water stress
- ☑ Change in land-use
- Changing wind patterns

#### **Policy**

- ☑ Carbon pricing mechanisms
- ☑ Changes to national legislation
- ✓ Increased difficulty in obtaining operations permits
- ☑ Lack of mature certification and sustainability standards

#### Market

- ☑ Availability and/or increased cost of raw materials
- ☑ Changing customer behavior
- ✓ Uncertainty in the market signals
- Reputation
- ☑ Increased partner and stakeholder concern and partner and stakeholder negative feedback
- ✓ Stigmatization of sector

- ☑ Heavy precipitation (rain, hail, snow/ice)
- ✓ Flood (coastal, fluvial, pluvial, ground water)
- ☑ Storm (including blizzards, dust, and sandstorms)
- ✓ Other acute physical risk, please specify :High winds
- ✓ Temperature variability
- ✓ Increased severity of extreme weather events
- ☑ Changing temperature (air, freshwater, marine water)
- ☑ Changing precipitation patterns and types (rain, hail, snow/ice)

#### **Technology**

- ☑ Transition to lower emissions technology and products
- ✓ Transition to water intensive, low carbon energy sources
- ✓ Unsuccessful investment in new technologies

#### Liability

- ☑ Exposure to litigation
- ✓ Non-compliance with regulations

### (2.2.2.14) Partners and stakeholders considered

Select all that apply

Customers

☑ Employees

✓ Investors

Suppliers

Regulators

✓ Local communities

✓ Indigenous peoples

### (2.2.2.15) Has this process changed since the previous reporting year?

Select from:

✓ No

## (2.2.2.16) Further details of process

LG&E and KU prepare an Integrated Resource Plan (IRP) every three years and submit the plan to the Kentucky Public Service Commission (KPSC). 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 IRP process, LG&E and KU model the most reliable and affordable way to meet current and future demand, including considering demand-side management, energy efficiency, renewable resources, environmental policies and carbon pricing.

[Add row]

### (2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?

### (2.2.7.1) Interconnections between environmental dependencies, impacts, risks and/or opportunities assessed

Select from:

Yes

## (2.2.7.2) Description of how interconnections are assessed

Integrated Resource Planning, Environmental Risk Management and Climate Assessment processes asses our business and sustainable strategy and clean energy transition, including calculations for all environmental dependencies, impacts, risks and opportunities. These interconnected processes are taken into account in business planning and resource management.

[Fixed row]

### (2.3) Have you identified priority locations across your value chain?

### (2.3.1) Identification of priority locations

Select from:

✓ Yes, we have identified priority locations

### (2.3.2) Value chain stages where priority locations have been identified

Select all that apply

✓ Direct operations

### (2.3.3) Types of priority locations identified

#### **Sensitive locations**

✓ Areas important for biodiversity

### (2.3.4) Description of process to identify priority locations

Impacts on biodiversity are relevant in siting of our facilities. PPL's utilities have implemented habitat mitigation practices to prevent or reduce detrimental effects on biodiversity from company actions and ongoing operations, wherever possible. We use pollinator-supportive and native plants as part of construction, maintenance and restoration activities where practical. We have adopted a comprehensive Avian Protection Plan to protect birds from coming in contact with electrical equipment and power lines.

As a requirement of the permitting process, PPL Electric uses the Pennsylvania Natural Diversity Inventory system, a tool that aids in identification and protection of species of concern in proposed work areas before work is executed and permits are requested. Additionally, PPL Electric screens for High Quality and Exceptional Value watersheds and streams, which are water body classifications that protect habitats that may support high levels of biodiversity. PPL Electric conducts rigorous invasive monitoring, treatment and eradication on our Rights-of-Way that cross state-owned and federally owned lands. By controlling Questionnaire 177 invasive plants, this promotes the presence, abundance, and/or biodiversity of native plants on these sites.

[Fixed row]

### (2.4) How does your organization define substantive effects on your organization?

#### Risks

### (2.4.1) Type of definition

Select all that apply

Qualitative

Quantitative

### (2.4.2) Indicator used to define substantive effect

Select from:

✓ Share price

### (2.4.6) Metrics considered in definition

Select all that apply

- ☑ Frequency of effect occurring
- ✓ Time horizon over which the effect occurs

✓ Likelihood of effect occurring

# (2.4.7) Application of definition

We define substantive effect as risks or opportunities driven by factors such as shareowner 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.

#### **Opportunities**

# (2.4.1) Type of definition

Select all that apply

- Qualitative
- Quantitative

## (2.4.2) Indicator used to define substantive effect

Select from:

☑ Share price

#### (2.4.6) Metrics considered in definition

Select all that apply

- ☑ Frequency of effect occurring
- ✓ Time horizon over which the effect occurs
- ☑ Likelihood of effect occurring

## (2.4.7) Application of definition

We define substantive effect as risks or opportunities driven by factors such as shareowner 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.

[Add row]

(2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

## (2.5.1) Identification and classification of potential water pollutants

Select from:

✓ Yes, we identify and classify our potential water pollutants

#### (2.5.2) How potential water pollutants are identified and classified

PPL follows state and federation regulations regarding effluent guidelines. Point sources are regulated under NPDES permitting. PPL monitors and reports pollutants with reasonable potential for environmental impact.

[Fixed row]

(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

#### Row 1

#### (2.5.1.1) Water pollutant category

Select from:

✓ Oil

## (2.5.1.2) Description of water pollutant and potential impacts

LG&E and KU are aware of the potential impacts of water pollutants and take care to follow all regulations by employing a variety of passive and active treatment options.

## (2.5.1.3) Value chain stage

Select all that apply

## (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

- ✓ Water recycling
- ✓ Resource recovery
- ✓ Upgrading of process equipment/methods
- ☑ Reduction or phase out of hazardous substances
- ✓ Implementation of integrated solid waste management systems
- ☑ Industrial and chemical accidents prevention, preparedness, and response
- ☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
- ☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

## (2.5.1.5) Please explain

LGE&KU uses a variety of wastewater pre-treatment options, including passive and active physical and biological treatments, before wastewater is released from the generation sites. We value water as a resource and, while zero percentage of PPL operations work within a high-water stress area, we continue to improve our water consumption and recycling rate by investing in new technology.

#### Row 2

#### (2.5.1.1) Water pollutant category

Select from:

✓ Nitrates

# (2.5.1.2) Description of water pollutant and potential impacts

LG&E and KU are aware of the potential impacts of water pollutants and take care to follow all regulations by employing a variety of passive and active treatment options.

# (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

- ✓ Water recycling
- ✓ Resource recovery
- ✓ Upgrading of process equipment/methods
- ☑ Reduction or phase out of hazardous substances
- ☑ Implementation of integrated solid waste management systems
- ✓ Industrial and chemical accidents prevention, preparedness, and response
- ☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
- ☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

#### (2.5.1.5) Please explain

LGE&KU uses a variety of wastewater pre-treatment options, including passive and active physical and biological treatments, before wastewater is released from the generation sites. We value water as a resource and, while zero percentage of PPL operations work within a high-water stress area, we continue to improve our water consumption and recycling rate by investing in new technology.

#### Row 3

# (2.5.1.1) Water pollutant category

Select from:

✓ Inorganic pollutants

# (2.5.1.2) Description of water pollutant and potential impacts

LG&E and KU are aware of the potential impacts of water pollutants and take care to follow all regulations by employing a variety of passive and active treatment options.

# (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

- ✓ Water recycling
- ✓ Resource recovery
- ✓ Upgrading of process equipment/methods
- ☑ Reduction or phase out of hazardous substances
- ☑ Implementation of integrated solid waste management systems
- ✓ Industrial and chemical accidents prevention, preparedness, and response
- ☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
- ☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

#### (2.5.1.5) Please explain

LGE&KU uses a variety of wastewater pre-treatment options, including passive and active physical and biological treatments, before wastewater is released from the generation sites. We value water as a resource and, while zero percentage of PPL operations work within a high-water stress area, we continue to improve our water consumption and recycling rate by investing in new technology.

#### Row 4

# (2.5.1.1) Water pollutant category

Select from:

☑ Other nutrients and oxygen demanding pollutants

#### (2.5.1.2) Description of water pollutant and potential impacts

LG&E and KU are aware of the potential impacts of water pollutants and take care to follow all regulations by employing a variety of passive and active treatment options.

# (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

- ✓ Water recycling
- ☑ Resource recovery
- ✓ Upgrading of process equipment/methods
- ☑ Reduction or phase out of hazardous substances
- ☑ Implementation of integrated solid waste management systems
- ✓ Industrial and chemical accidents prevention, preparedness, and response
- ☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
- ☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

#### (2.5.1.5) Please explain

LGE&KU uses a variety of wastewater pre-treatment options, including passive and active physical and biological treatments, before wastewater is released from the generation sites. We value water as a resource and, while zero percentage of PPL operations work within a high-water stress area, we continue to improve our water consumption and recycling rate by investing in new technology.

#### Row 5

# (2.5.1.1) Water pollutant category

Select from:

✓ Other physical pollutants

# (2.5.1.2) Description of water pollutant and potential impacts

LG&E and KU are aware of the potential impacts of water pollutants and take care to follow all regulations by employing a variety of passive and active treatment options.

## (2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

- ✓ Water recycling
- ☑ Resource recovery
- ✓ Upgrading of process equipment/methods
- ☑ Reduction or phase out of hazardous substances
- ☑ Implementation of integrated solid waste management systems
- ✓ Industrial and chemical accidents prevention, preparedness, and response
- ☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
- ☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

#### (2.5.1.5) Please explain

LGE&KU uses a variety of wastewater pre-treatment options, including passive and active physical and biological treatments, before wastewater is released from the generation sites.

We value water as a resource and, while zero percentage of PPL operations work within a high-water stress area, we continue to improve our water consumption and recycling rate by investing in new technology.

[Add row]

#### C3. Disclosure of risks and opportunities

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

	Environmental risks identified
Climate change	Select from:  ✓ Yes, both in direct operations and upstream/downstream value chain
Water	Select from:  ✓ Yes, only within our direct operations
Plastics	Select from:  ✓ No

[Fixed row]

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

#### **Climate change**

# (3.1.1.1) Risk identifier

Select from:

Risk1

#### (3.1.1.3) Risk types and primary environmental risk driver

#### **Acute physical**

☑ Cyclone, hurricane, typhoon

# (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Direct operations

## (3.1.1.6) Country/area where the risk occurs

Select all that apply

United States of America

# (3.1.1.9) Organization-specific description of risk

Increasingly frequent and severe storms producing high winds and precipitation, and extreme heat and cold can disrupt PPL's operations, increase costs and hurt the reliability of PPL's service in a variety of ways. For example, increased flooding and severe storms could damage equipment or disrupt fuel supply, fallen trees and debris can lead to outages, bring down power lines and block access for restoration efforts.

# (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Increased indirect [operating] costs

#### (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Short-term

# (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ Virtually certain

## (3.1.1.14) Magnitude

Select from:

✓ Low

#### (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

✓ Yes

#### (3.1.1.20) Anticipated financial effect figure in the short-term - maximum (currency)

77000000

# (3.1.1.25) Explanation of financial effect figure

Proxy for financial impact is the cost of a March 2023 windstorm, which occurred in LG&E and KU's service territory. Total storm expense (O&M) was 77 million dollars before insurance coverage.

#### (3.1.1.26) Primary response to risk

#### Infrastructure, technology and spending

✓ Improve maintenance of infrastructure

# (3.1.1.27) Cost of response to risk

2390000000

#### (3.1.1.28) Explanation of cost calculation

Mitigation of physical risk entails a variety of measures across our generation, transmission and distribution systems. Specific to severe storms with the potential for high winds and flooding damage, 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 made multi-billion-dollar 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.

The cost of response of approximately 2.4 billion represents 2023 capital investments from PPL's utilities.

## (3.1.1.29) Description of response

Financial impact and cost figure are estimates and are provided here as examples of potential implications of physical risks. Magnitude of financial impact is assessed as low due to ability of company to recover costs of storms. Storm expense is subject to regulatory recovery.

PPL also maintains insurance coverage to protect from potential property damage losses due to the extreme weather impact on our physical assets such as generation units, substations and buildings. PPL is a member of EPRI's Climate READi initiative to address energy system climate resilience and adaptation to increasing weather events.

#### Water

#### (3.1.1.1) Risk identifier

Select from:

✓ Risk2

## (3.1.1.3) Risk types and primary environmental risk driver

#### **Policy**

☑ Changes to regulation of existing products and services

# (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Direct operations

# (3.1.1.6) Country/area where the risk occurs

Select all that apply

✓ United States of America

# (3.1.1.7) River basin where the risk occurs

Select all that apply

☑ Other, please specify :Ohio River Valley

#### (3.1.1.9) Organization-specific description of risk

Regulations as currently constructed do not provide a timeline that allows for implementation. Furthermore, the rules as constructed will lead to significant reliability and affordability concerns. The risk of which would threaten our measured and responsible clean energy strategy.

# (3.1.1.11) Primary financial effect of the risk

Select from:

☑ Other, please specify: If regulations are upheld by courts, it is unknown how public service commission will treat the capital expenditures associated with compliance.

#### Climate change

#### (3.1.1.1) Risk identifier

Select from:

✓ Risk3

# (3.1.1.3) Risk types and primary environmental risk driver

#### **Policy**

☑ Changes to regulation of existing products and services

#### (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Direct operations

# (3.1.1.6) Country/area where the risk occurs

Select all that apply

✓ United States of America

# (3.1.1.9) Organization-specific description of risk

In Rhode Island, the Public Utilities Commission is undertaking a regulatory proceeding to investigate the future of gas use and infrastructure in the state, a response to the 2021 Act on Climate, which requires economy-wide greenhouse gas emissions reductions to reach net-zero by 2050. The investigation into the gas distribution business will look at changes, such as moratoriums on new hookups, incentives for renewable natural gas, and transitioning customers to alternative heating sources like electricity.

#### (3.1.1.11) Primary financial effect of the risk

Select from:

✓ Other, please specify

## (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Short-term

# (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ Virtually certain

#### (3.1.1.14) Magnitude

Select from:

✓ Low

## (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

**V** No

# (3.1.1.26) Primary response to risk

#### Compliance, monitoring and targets

✓ Other compliance, monitoring or target, please specify: The financial impact to the company is anticipated to be low because all prudent costs, including those to comply with regulations, are included in utility rates. Further the company anticipates opportunities due to increased electrification.

# (3.1.1.28) Explanation of cost calculation

As part of the proceeding, RIE is reviewing the Rhode Island Commission's order and evaluating options that will achieve its requirements, as well as the goals of the 2021 Act on Climate and identify investments in the natural gas infrastructure that are needed to maintain safety, reliability and affordability for customers.

#### Climate change

# (3.1.1.1) Risk identifier

Select from:

✓ Risk4

#### (3.1.1.3) Risk types and primary environmental risk driver

#### **Policy**

☑ Changes to regulation of existing products and services

## (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Upstream value chain

#### (3.1.1.6) Country/area where the risk occurs

Select all that apply

✓ United States of America

#### (3.1.1.9) Organization-specific description of risk

100% Renewable Energy Standard by 2033 in Rhode Island and enacted similarly/emerging in other New England states will promote more renewable electricity sources and purchase/settlement of RECs, which can impact overall supply costs up to the allowed cost of an Alternative Compliance Payment.

#### (3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

✓ Medium-term

## (3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

✓ Very likely

#### (3.1.1.14) Magnitude

Select from:

✓ Medium-low

# (3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

✓ No

## (3.1.1.28) Explanation of cost calculation

The financial impact to the company is unknown. The cost of purchased power is passed through to customers. RI state report found total cost of 100% Renewable Energy by 2030 to be on the order of 1-2 billion (energy.ri.gov/100percent).

#### (3.1.1.29) Description of response

Impact to the company identified as medium-low due to potential increased costs passed to customers to impact overall affordability of electricity and reliability of electricity supply. Costs of purchased power are recoverable. Pennsylvania is also expected to consider legislation modifying the state's Alternative Energy Portfolio Standard to increase the percentage of renewables that utilities must purchase.

#### Climate change

#### (3.1.1.1) Risk identifier

Select from:

✓ Risk5

## (3.1.1.3) Risk types and primary environmental risk driver

#### **Policy**

☑ Changes to regulation of existing products and services

# (3.1.1.4) Value chain stage where the risk occurs

Select from:

✓ Upstream value chain

#### (3.1.1.6) Country/area where the risk occurs

Select all that apply

✓ United States of America

#### (3.1.1.9) Organization-specific description of risk

Regulations as currently constructed do not provide a timeline that allows for implementation. Furthermore, the rules as constructed will lead to significant reliability and affordability concerns. The risk of which would threaten our measured and responsible clean energy strategy.

#### (3.1.1.11) Primary financial effect of the risk

Select from:

☑ Other, please specify: If regulations are upheld by courts, it is unknown how public service commission will treat the capital expenditures associated with compliance.

[Add row]

(3.2) Within each river basin, how many facilities are exposed to substantive effects of water-related risks, and what percentage of your total number of facilities does this represent?

#### Row 1

# (3.2.1) Country/Area & River basin

#### **United States of America**

✓ Other, please specify :Ohio River

#### (3.2.2) Value chain stages where facilities at risk have been identified in this river basin

Select all that apply

✓ Direct operations

#### (3.2.3) Number of facilities within direct operations exposed to water-related risk in this river basin

4

# (3.2.4) % of your organization's total facilities within direct operations exposed to water-related risk in this river basin

Select from:

**✓** 1-25%

#### (3.2.11) Please explain

Zero PPL operations are in areas of high-water stress. LG&E and KU follow best management practice processes where water-related risks of operations are mitigated and controlled. PPL, LG&E and KU are unable to predict the outcome of current or future litigation or regulatory proceedings, but do not expect a material impact on operations.

[Add row]

(3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

Water-related regulatory violations
Select from: ✓ No

[Fixed row]

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

Select from:

- ☑ No, and we do not anticipate being regulated in the next three years
- (3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

#### Climate change

#### (3.6.1) Environmental opportunities identified

Select from:

✓ Yes, we have identified opportunities, and some/all are being realized

#### Water

#### (3.6.1) Environmental opportunities identified

Select from:

✓ No

(3.6.2) Primary reason why your organization does not consider itself to have environmental opportunities

Select from:

✓ Not an immediate strategic priority

#### (3.6.3) Please explain

PPL carefully manages the water it uses and monitors the impact of wastewater discharged into waterways. PPL's utilities support programs that protect waterways and the ecosystems that depend on them in the service areas where the utilities operate. In addition, the companies collaborate with a variety of stakeholders and state agencies to ensure that watersheds and reservoirs meet both the needs of the utilities and other stakeholders, including the public.

PPL has zero operations in any high-water stress areas. [Fixed row]

(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

#### Climate change

#### (3.6.1.1) Opportunity identifier

Select from:

✓ Opp1

## (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### Resilience

✓ Increased resilience to impacts of climate change

#### (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

✓ Direct operations

# (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

✓ United States of America

## (3.6.1.8) Organization 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. Under current regulation, PPL's utilities earn a return on these types of investments, which supports long-term earnings growth.

#### (3.6.1.9) Primary financial effect of the opportunity

Select from:

✓ Increased value of fixed assets

#### (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

✓ Short-term

# (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

✓ Virtually certain (99–100%)

#### (3.6.1.12) Magnitude

Select from:

High

# (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

65% of PPL's planned capital investment between now and 2027 are focused on transmission and distribution updates the majority of which is promote grid modernization and resiliency throughout our service territories. The remaining planned capital investment is focused on improvements to natural gas operations in Kentucky and Rhode Island and generation transition in Kentucky.

The anticipated effect reflects the return expected on investments needed to enhance and modernize the grid, including transmission and distribution enhancements. As is typical for regulated utility we expect these prudent capital expenditure to produce a return on equity consistent with commission approvals in each jurisdiction.

#### (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

✓ Yes

#### (3.6.1.17) Anticipated financial effect figure in the short-term - minimum (currency)

229000000

## (3.6.1.23) Explanation of financial effect figures

The magnitude of financial impact is a proxy reflecting the return expected on investments needed to enhance and modernize the grid, including transmission and distribution enhancements. As regulated utilities, we look to regulated return on investments we make

The 2023 average authorized ROE for electric utilities of 9.6% was used as a proxy to derive approximate impact of 229,000,000 Also a number of our transmission and distribution expenditures are recovered in near real time through rate mechanisms in PA and RI.

### (3.6.1.24) Cost to realize opportunity

2390000000

## (3.6.1.25) Explanation of cost calculation

Proxy for cost of approximately 2.4 billion represents 2023 capital investments from PPL's utilities.

#### (3.6.1.26) Strategy to realize opportunity

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.

#### Climate change

# (3.6.1.1) Opportunity identifier

Select from:

✓ Opp2

#### (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### **Products and services**

☑ Ability to diversify business activities

## (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

✓ Direct operations

#### (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

✓ United States of America

#### (3.6.1.8) Organization specific description

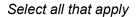
Decarbonization of the economy will lead to increased electrification, directly impacting electricity sales and supportive investments. Additionally, increased demand provides new investment opportunities in the renewable and distributed energy space, including solar generation and energy storage solutions driven by customer demand, favorable policies, and economic retirement of existing coal plants. Replacement generation for fossil units that we are economically retiring with commission approval (NGCC two solar facilities and battery storage).

#### (3.6.1.9) Primary financial effect of the opportunity

Select from:

✓ Increased revenues resulting from increased demand for products and services

# (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization



✓ Short-term

#### (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

✓ Virtually certain (99–100%)

#### (3.6.1.12) Magnitude

Select from:

Medium

# (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

65% of PPL's planned capital investment between now and 2027 are focused on transmission and distribution updates the majority of which is promote grid modernization and resiliency throughout our service territories. The remaining planned capital investment is focused on improvements to natural gas operations in Kentucky and Rhode Island and generation transition in Kentucky.

The anticipated effect reflects the return expected on investments needed to enhance and modernize the grid, including transmission and distribution enhancements. As is typical for regulated utility we expect these prudent capital expenditure to produce a return on equity consistent with commission approvals in each jurisdiction.

## (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

✓ No

#### (3.6.1.24) Cost to realize opportunity

1700000000

## (3.6.1.25) Explanation of cost calculation

Costs to realize include cost projections for approved Natural Gas Combined Cycle plant, solar generation, and energy storage. All of which entail a key pillar of our clean energy strategy to enable customer decarbonization.

## (3.6.1.26) Strategy to realize opportunity

PPL leverages our utilities leading performance to expand and modernize the grid and integrate utility scale renewables and distributed energy resources.

#### Climate change

# (3.6.1.1) Opportunity identifier

Select from:

✓ Opp3

# (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### Products and services

✓ Other products and services opportunity, please specify: Expansion/development of low emissions goods and services.

## (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

✓ Direct operations

# (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

✓ United States of America

#### (3.6.1.8) Organization specific description

The State of Rhode Island is adopting California's Advance Clean Cars II regulation and will initiate rulemaking in 2023. This regulation will phase out sales of new internal combustion engine light-duty vehicles fully by 2035 (differing rules between light-duty and heavier vehicles). This policy will drive the market predominantly toward electric vehicles, causing an increase in electricity demand. Rhode Island's new regulation aligns with PPL's current fleet electrification goals.

#### (3.6.1.9) Primary financial effect of the opportunity

Select from:

✓ Increased revenues resulting from increased demand for products and services

## (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

✓ Medium-term

#### (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

✓ Virtually certain (99–100%)

#### (3.6.1.12) Magnitude

Select from:

✓ Medium-high

# (3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

Cannot currently be predicted.

#### (3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

✓ No

# (3.6.1.25) Explanation of cost calculation

Not specifically calculated for this opportunity.

Proxy for opportunity is Rhode Island state policy, which is the most advanced among the states in which PPL operates. RIE has and will continue to support electrifying transportation through its Electric Transportation Initiative, Grid Modernization, and other distribution investments in new or additional infrastructure required to support the increase in electricity demand.

## (3.6.1.26) Strategy to realize opportunity

Transportation electrification is expected to be a driver for increased electricity demand nationwide. This opportunity exists for all of PPL's operating companies to varying degrees driven by national and state policies and growing customer demand.

Estimates in Rhode Island indicate that transportation electrification may lead to a potential near doubling of electricity demand by 2050 (see the State of Rhode Island's 100% Renewable Electricity by 2030 report <a href="https://www.energy.ri.gov/100percent">www.energy.ri.gov/100percent</a>).

RIE will incur some costs associated with this regulation due to our own fleet electrification. Many of these costs are already accounted for due to PPL's existing fleet electrification goals.

#### Climate change

#### (3.6.1.1) Opportunity identifier

Select from:

✓ Opp4

#### (3.6.1.3) Opportunity type and primary environmental opportunity driver

#### Products and services

✓ Increased sales of existing products and services

#### (3.6.1.4) Value chain stage where the opportunity occurs

Select from:

✓ Direct operations

# (3.6.1.5) Country/area where the opportunity occurs

Select all that apply

✓ United States of America

#### (3.6.1.8) Organization specific description

PPL is projecting strong load growth expectations related to a surge in electricity demand from datacenters and an increase in domestic manufacturing within our service territories.

## (3.6.1.9) Primary financial effect of the opportunity

Select from:

✓ Increased revenues resulting from increased demand for products and services

#### (3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

✓ Short-term

## (3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

✓ Virtually certain (99–100%)

## (3.6.1.12) Magnitude

Select from:

✓ Medium-high

#### (3.6.1.25) Explanation of cost calculation

Not specifically calculated for this opportunity.

#### (3.6.1.26) Strategy to realize opportunity

PPL continues to support load growth through its grid modernization and other transmission and distribution investments in new or additional infrastructure required to support the increase in electricity demand.

[Add row]

#### C4. Governance

#### (4.1) Does your organization have a board of directors or an equivalent governing body?

# (4.1.1) Board of directors or equivalent governing body

Select from:

√ Yes

# (4.1.2) Frequency with which the board or equivalent meets

Select from:

Quarterly

#### (4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

☑ Executive directors or equivalent

✓ Independent non-executive directors or equivalent

# (4.1.4) Board diversity and inclusion policy

Select from:

✓ Yes, and it is publicly available

#### (4.1.5) Briefly describe what the policy covers

PPL's Standards of Integrity and Supplier Code of Conduct provide a framework for operations that reflect PPL's values and principles, not only for our own operating companies but for vendors and suppliers as well, including striving to uphold human and workplace rights in all operations, and treating workers fairly and without discrimination based on protected characteristics. PPL is an equal opportunity employer dedicated to diversity and the strength it brings to the workplace.

#### (4.1.6) Attach the policy (optional)

#### (4.1.1) Is there board-level oversight of environmental issues within your organization?

#### Climate change

# (4.1.1.1) Board-level oversight of this environmental issue

Select from:

Yes

#### Water

# (4.1.1.1) Board-level oversight of this environmental issue

Select from:

✓ No, and we do not plan to within the next two years

#### (4.1.1.2) Primary reason for no board-level oversight of this environmental issue

Select from:

✓ Not an immediate strategic priority

## (4.1.1.3) Explain why your organization does not have board-level oversight of this environmental issue

PPL carefully manages the water it uses and monitors the impact of wastewater discharged into waterways. PPL's utilities support programs that protect waterways and the ecosystems that depend on them in the service areas where the utilities operate. In addition, the companies collaborate with a variety of stakeholders and state agencies to ensure that watersheds and reservoirs meet both the needs of the utilities and other stakeholders, including the public.

PPL has zero operations in any high-water stress areas.

## **Biodiversity**

# (4.1.1.1) Board-level oversight of this environmental issue

Select from:

Yes

[Fixed row]

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

#### Climate change

#### (4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☑ Board-level committee

# (4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

✓ Yes

## (4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Other policy applicable to the board, please specify: Systemic risk oversight is a function of the full Board, including strategic, operational, legal and regulatory. Climate-related risks have been delegated to the Committees. In addition, the full Board receives management sustainability updates.

## (4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

✓ Sporadic – agenda item as important matters arise

# (4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

- ✓ Overseeing the setting of corporate targets
- ☑ Monitoring progress towards corporate targets
- ☑ Approving corporate policies and/or commitments
- ✓ Monitoring the implementation of the business strategy
- ☑ Monitoring the implementation of a climate transition plan

- ✓ Overseeing and guiding acquisitions, mergers, and divestitures
- ☑ Overseeing and guiding the development of a climate transition plan

#### (4.1.2.7) Please explain

Systemic risk oversight is a function of the full Board, including strategic, operational, legal and regulatory. As detailed below, climate-related risks have been delegated to the Committees; In addition, the full Board receives management sustainability updates as significant issues arise.

The Board's Governance, Nominating and Sustainability Committee (GNSC) oversees the company's sustainability-related policies and practices; reviews key corporate sustainability disclosures and receives regular sustainability and environmental, social and governance (ESG) reports, including discussion of key climate and clean energy trends, risks and opportunities.

The full Board receives reports from the GNSC after each GNSC 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. The GNSC receives an annual report of corporate political engagement, and the full Board receives a report of public policy engagement on key policy issues on an annual basis, with periodic updates as important matters arise.

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.

The Board's Finance Committee annually reviews and approves the business plan, typically three years, and capital expenditure plan, typically five years. The Finance Committee also approves major capital expenditures, acquisitions and divestitures, risk management policies and potential borrowing at PPL and operating companies. 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.

The Board's People and Compensation Committee annually reviews and approves the compensation structure, including ESG 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.

## (4.2) Does your organization's board have competency on environmental issues?

#### Climate change

#### (4.2.1) Board-level competency on this environmental issue

Select from:

✓ Yes

## (4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

- ☑ Consulting regularly with an internal, permanent, subject-expert working group
- ☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)
- ☑ Having at least one board member with expertise on this environmental issue
- ☑ Other, please specify: Experience related to oversight of climate risk and clean energy strategy. Directors may participate in external training programs at the Company's expense, including education environmental issues, climate goals, and regulations and policies.

# (4.2.3) Environmental expertise of the board member

#### **Experience**

✓ Active member of an environmental committee or organization

#### Water

# (4.2.1) Board-level competency on this environmental issue

Select from:

✓ No, and we do not plan to within the next two years

# (4.2.4) Primary reason for no board-level competency on this environmental issue

Select from:

✓ Not an immediate strategic priority

#### (4.2.5) Explain why your organization does not have a board with competence on this environmental issue

PPL carefully manages the water it uses and monitors the impact of wastewater discharged into waterways. PPL's utilities support programs that protect waterways and the ecosystems that depend on them in the service areas where the utilities operate. In addition, the companies collaborate with a variety of stakeholders and state agencies to ensure that watersheds and reservoirs meet both the needs of the utilities and other stakeholders, including the public.

PPL has zero operations in any high-water stress areas. [Fixed row]

#### (4.3) Is there management-level responsibility for environmental issues within your organization?

	Management-level responsibility for this environmental issue
Climate change	Select from:  ✓ Yes
Water	Select from:  ✓ Yes
Biodiversity	Select from:  ✓ Yes

[Fixed row]

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

#### **Climate change**

# (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

☑ Chief Executive Officer (CEO)

# (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ✓ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Strategy and financial planning

- ✓ Developing a business strategy which considers environmental issues
- ✓ Developing a climate transition plan
- ✓ Implementing a climate transition plan
- ✓ Implementing the business strategy related to environmental issues

# (4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

# (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

✓ More frequently than quarterly

#### (4.3.1.6) Please explain

The Corporate Leadership Council (CEO, COO, CFO, CL, CHRO, and CITO, collectively "CLC") provides management and oversight of the company's overall risk management practices and business strategy, including the company's clean energy transition plans, targets and metrics. Guided by PPL's Investor Relations, CLC and other company leaders inform our investors of the company's business strategy, clean energy transition plans and progress toward climate goals. Given the materiality to our business of climate change, water and biodiversity are included as subsets of climate change assessment and management.

#### Climate change

# (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

✓ Chief Operating Officer (COO)

## (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Strategy and financial planning

- ✓ Developing a business strategy which considers environmental issues
- ✓ Developing a climate transition plan
- ✓ Implementing a climate transition plan
- ✓ Implementing the business strategy related to environmental issues

#### (4.3.1.4) Reporting line

Select from:

☑ Reports to the Chief Executive Officer (CEO)

# (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

✓ More frequently than quarterly

# (4.3.1.6) Please explain

Given the materiality to our business of climate change, water and biodiversity are included as subsets of climate change assessment and management.

#### Climate change

# (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

☑ Chief Financial Officer (CFO)

# (4.3.1.2) Environmental responsibilities of this position

#### Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ✓ Assessing future trends in environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

#### Strategy and financial planning

- ✓ Developing a business strategy which considers environmental issues
- ✓ Developing a climate transition plan
- ✓ Implementing a climate transition plan
- ✓ Implementing the business strategy related to environmental issues

# (4.3.1.4) Reporting line

Select from:

☑ Reports to the Chief Executive Officer (CEO)

# (4.3.1.5) Frequency of reporting to the board on environmental issues

#### Select from:

✓ More frequently than quarterly

# (4.3.1.6) Please explain

Given the materiality to our business of climate change, water and biodiversity are included as subsets of climate change assessment and management.

## Climate change

# (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

☑ Other C-Suite Officer, please specify: Executive Vice President - Utilities, Chief Legal Officer and Corporate Secretary

# (4.3.1.2) Environmental responsibilities of this position

## Dependencies, impacts, risks and opportunities

- ✓ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

## Strategy and financial planning

- ✓ Developing a business strategy which considers environmental issues
- ✓ Developing a climate transition plan
- ✓ Implementing a climate transition plan
- ✓ Implementing the business strategy related to environmental issues

## (4.3.1.4) Reporting line

#### Select from:

☑ Reports to the Chief Executive Officer (CEO)

# (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

✓ More frequently than quarterly

## (4.3.1.6) Please explain

Given the materiality to our business of climate change, water and biodiversity are included as subsets of climate change assessment and management.

## Climate change

## (4.3.1.1) Position of individual or committee with responsibility

#### Other

☑ Other, please specify: Vice President - Public Affairs and Sustainability

## (4.3.1.2) Environmental responsibilities of this position

### Dependencies, impacts, risks and opportunities

- ✓ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

## Strategy and financial planning

- ✓ Developing a business strategy which considers environmental issues
- ✓ Developing a climate transition plan
- ✓ Implementing a climate transition plan
- ✓ Implementing the business strategy related to environmental issues

# (4.3.1.4) Reporting line

Select from:

☑ Other, please specify: Reports to Executive Vice President - Utilities, Chief Legal Officer and Corporate Secretary

## (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

✓ More frequently than quarterly

## (4.3.1.6) Please explain

The Vice President – Public Affairs and Sustainability chairs the corporate sustainability committee, to ensure that PPL is effectively managing, monitoring and disclosing key sustainability risk areas. CLC and operating company presidents review all corporate sustainability disclosures and receive updates and reports from Enterprise Risk Management and sustainability management throughout the year and as important matters arise.

The Vice President – Public Affairs and Sustainability provides updated information and reports to the Governance, Nominating and Sustainability Committee at each regularly scheduled committee meeting. Given the materiality to our business of climate change, water and biodiversity are included as subsets of climate change assessment and management.

## Climate change

## (4.3.1.1) Position of individual or committee with responsibility

#### **Executive level**

President

## (4.3.1.2) Environmental responsibilities of this position

## Dependencies, impacts, risks and opportunities

- ☑ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

## Strategy and financial planning

- ✓ Developing a business strategy which considers environmental issues
- ✓ Developing a climate transition plan

- ✓ Implementing a climate transition plan
- ✓ Implementing the business strategy related to environmental issues

## (4.3.1.4) Reporting line

Select from:

✓ Other, please specify :Reports to EVP – Utilities, Chief Legal Officer and Corporate Secretary

## (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ As important matters arise

# (4.3.1.6) Please explain

Each president of PPL's operating companies is responsible for assessing climate-related risks and opportunities and managing climate-related risks and opportunities.

PPL maintains a robust enterprise risk management (ERM) process that provides a business portfolio view of material risks that may impact achievement of the company's business strategy. As part of the ERM process, operating company leadership and service groups identify, assess, monitor and report on ongoing and emerging risks, including climate-related and broader ESG risks.

This Risk Management department reports to the executive vice president and chief financial officer and oversees the ERM process. Given the materiality to our business of climate change, water and biodiversity are included as subsets of climate change assessment and management.

## Climate change

# (4.3.1.1) Position of individual or committee with responsibility

### **Executive level**

✓ Chief Risks Officer (CRO)

## (4.3.1.2) Environmental responsibilities of this position

## Dependencies, impacts, risks and opportunities

- ✓ Assessing environmental dependencies, impacts, risks, and opportunities
- ☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities
- ☑ Managing environmental dependencies, impacts, risks, and opportunities

## (4.3.1.4) Reporting line

Select from:

☑ Reports to the Chief Financial Officer (CFO)

## (4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

Quarterly

## (4.3.1.6) Please explain

PPL maintains a robust enterprise risk management (ERM) process that provides a business portfolio view of material risks that may impact achievement of the company's business strategy. As part of the ERM process, operating company leadership and service groups identify, assess, monitor and report on ongoing and emerging risks, including climate-related and broader sustainability risks.

The Risk Management department reports to the executive vice president and chief financial officer and oversees the ERM process. [Add row]

# (4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

## Climate change

## (4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

Yes

## (4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

30

## (4.5.3) Please explain

Long-term incentives awards included performance units tied to corporate environmental, social and governance metrics (ESG), including: (1) reductions in company vehicle emissions over the 3 year performance period in furtherance of the overall PPL goal of electrifying 100% of light-duty vehicles and 50% of medium/heavy duty vehicles by 2030, (2) reductions in building energy use in Pennsylvania and Kentucky over the 3 year performance period, measured by gigawatt hours energy use in Pennsylvania and Kentucky and Billion British Thermal Units energy use in Kentucky, and (3) the retirement of Mill Creek Unit 1, a coal-fired generating facility in Kentucky, by December 31, 2025.

Annual ESG discretionary component of compensation for top executives, with 10% specifically focused on safety, DEI, employee engagement, environmental stewardship and modeling corporate values.

In addition, all employees in LG&E and KU are entitled to a monetary reward for taking mass transit.

## Water

## (4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

✓ No, and we do not plan to introduce them in the next two years

## (4.5.3) Please explain

PPL carefully manages the water it uses and monitors the impact of wastewater discharged into waterways. PPL's utilities support programs that protect waterways and the ecosystems that depend on them in the service areas where the utilities operate. In addition, the companies collaborate with a variety of stakeholders and state agencies to ensure that watersheds and reservoirs meet both the needs of the utilities and other stakeholders, including the public.

PPL has zero operations in any high-water stress areas. [Fixed row]

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

## Climate change

# (4.5.1.1) Position entitled to monetary incentive

#### **Board or executive level**

☑ Other C-Suite Officer, please specify: Corporate executive team and other designated employees.

## (4.5.1.2) Incentives

Select all that apply

✓ Shares

✓ Other, please specify :Performance Unit Grant as part of Long Term Incentive Plan

# (4.5.1.3) Performance metrics

## **Targets**

✓ Other targets-related metrics, please specify: Strategy and financial planning

#### **Emission reduction**

☑ Other emission reduction-related metrics, please specify: Vehicle Emissions Reduction

## Resource use and efficiency

☑ Energy efficiency improvement

# (4.5.1.4) Incentive plan the incentives are linked to

Select from:

✓ Long-Term Incentive Plan, or equivalent, only (e.g. contractual multi-year bonus)

## (4.5.1.5) Further details of incentives

We align our compensation program with corporate strategy through several types of performance-related incentives. Beginning in 2022 and continuing in 2023, our long-term incentives awards included performance units tied to corporate environmental, social and governance metrics, or ESG. The 2023 Performance Units – ESG

are based on three priority metrics: (1) reductions in company vehicle emissions over the three-year performance period in furtherance of the overall PPL goal of electrifying 100% of light-duty vehicles and 50% of medium/heavy duty vehicles by 2030, (2) reductions in building energy use in Pennsylvania and Kentucky over the three-year performance period, measured by gigawatt hours (GWh) energy use in Pennsylvania and Kentucky and Billion British Thermal Units (BBtu) energy use in Kentucky, and (3) the retirement of Mill Creek Unit 1, a coal-fired generating facility in Kentucky, by December 31, 2025.

# (4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

Progress toward the company's 2050 net-zero emissions goal is included in executive compensation through the Performance Units – ESG, which are linked to coal plant retirements, fleet electrification and building energy use.

## Climate change

## (4.5.1.1) Position entitled to monetary incentive

### Facility/Unit/Site management

✓ Other facility/unit/site manager, please specify: Designated employees

# (4.5.1.2) Incentives

Select all that apply

✓ Bonus - % of salary

## (4.5.1.3) Performance metrics

## Resource use and efficiency

☑ Energy efficiency improvement

## (4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Short-Term Incentive Plan, or equivalent, only (e.g. contractual annual bonus)

# (4.5.1.5) Further details of incentives

In 2023, ESG was included in the annual discretionary component of compensation for top executives, with 10% specifically focused on safety, DEI, employee engagement, environmental stewardship and modeling corporate values.

[Add row]

# (4.6) Does your organization have an environmental policy that addresses environmental issues?

Does your organization have any environmental policies?
Select from:  ✓ Yes

[Fixed row]

## (4.6.1) Provide details of your environmental policies.

## Row 1

# (4.6.1.1) Environmental issues covered

Select all that apply

- ✓ Climate change
- Water
- ✓ Biodiversity

# (4.6.1.2) Level of coverage

Select from:

✓ Organization-wide

# (4.6.1.3) Value chain stages covered

Select all that apply

- ✓ Direct operations
- ✓ Upstream value chain
- ✓ Downstream value chain

## (4.6.1.4) Explain the coverage

Our Environmental Policy provides an enterprise-wide framework to ensure we conduct business in an environmentally responsible manner. In addition to ensuring compliance with all state and federal environmental regulations, we have a longstanding commitment to carry out all business activities in ways that preserve and promote a clean, safe and healthy environment.

PPL's operating companies have a strong commitment to compliance, transparency and continuous improvement. The companies share best practices and provide regular performance reports to senior leadership, and external reporting of environmental performance is reflected in annual reports available to the public. See page 80 of the attached document for the policy list.

## (4.6.1.5) Environmental policy content

#### **Environmental commitments**

- ✓ Commitment to avoidance of negative impacts on threatened and protected species
- ☑ Commitment to comply with regulations and mandatory standards
- ☑ Commitment to implementation of nature-based solutions that support landscape restoration and long-term protection of natural ecosystems
- ☑ Commitment to respect legally designated protected areas
- ☑ Commitment to stakeholder engagement and capacity building on environmental issues

## **Climate-specific commitments**

☑ Commitment to net-zero emissions

## **Water-specific commitments**

- ☑ Commitment to control/reduce/eliminate water pollution
- ☑ Commitment to the conservation of freshwater ecosystems
- ☑ Commitment to water stewardship and/or collective action

#### Social commitments

- ☑ Commitment to promote gender equality and women's empowerment
- ☑ Commitment to respect internationally recognized human rights

### Additional references/Descriptions

- ✓ Description of biodiversity-related performance standards
- ☑ Description of dependencies on natural resources and ecosystems
- ✓ Description of renewable electricity procurement practices
- ☑ Reference to timebound environmental milestones and targets

## (4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

✓ No, and we do not plan to align in the next two years

## (4.6.1.7) Public availability

Select from:

✓ Publicly available

## (4.6.1.8) Attach the policy

PPL\_Corporation\_2023-Sustainability-Report\_FINAL.pdf [Add row]

(4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

(4.10.1) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

Select from:

✓ Yes

## (4.10.2) Collaborative framework or initiative

Select all that apply

- ✓ Climate Action 100+
- ☑ Global Reporting Initiative (GRI) Community Member
- ✓ Task Force on Climate-related Financial Disclosures (TCFD)
- ☑ Other, please specify :EEI-AGA sector report

## (4.10.3) Describe your organization's role within each framework or initiative

PPL uses these groups as a resource for ESG disclosures. The frameworks and initiatives provide structure to environmental reporting, while also acting as a source of feedback.

[Fixed row]

(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

(4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

Select all that apply

- ✓ Yes, we engaged directly with policy makers
- ✓ Yes, we engaged indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

(4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

Select from:

☑ Yes, we have a public commitment or position statement in line with global environmental treaties or policy goals

## (4.11.3) Global environmental treaties or policy goals in line with public commitment or position statement

Select all that apply

✓ Paris Agreement

## (4.11.4) Attach commitment or position statement

PPL\_Climate-Policy-Principles.pdf

## (4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

Yes

## (4.11.6) Types of transparency register your organization is registered on

Select all that apply

✓ Mandatory government register

# (4.11.7) Disclose the transparency registers on which your organization is registered & the relevant ID numbers for your organization

31086

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

As indicated in our Climate Policy Principles (https://www.pplweb.com/wp-content/uploads/2022/08/PPL\_Climate-Policy-Principles.pdf), PPL is committed to our mission to provide safe, affordable, reliable, and sustainable energy to our customers as we pursue our ambitious goal to achieve net-zero carbon emissions by 2050. The company measures all proposed climate policies against the core principles of sustainability, customer focus, and effectiveness detailed in our Climate Policy Principles.

PPL's public and external affairs leadership meets regularly to discuss legislative and policy issues important to the company, our customers and stakeholders. Executive leadership considers policy positions on key issues during scheduled meetings and is informed of significant policy developments through written reports

and verbal communications. PPL's Board of Directors receives an annual report on key issues and advocacy positions as well as periodic updates as appropriate. PPL's public and external affairs professionals present on major political and policy developments during board and executive leadership meetings as needed. [Fixed row]

# (4.11.1) On what policies, laws, or regulations that may (positively or negatively) impact the environment has your organization been engaging directly with policy makers in the reporting year?

## Row 1

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

Inflation Reduction Act

## (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

## (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

## **Energy and renewables**

- ✓ Low-carbon, non-renewable energy generation
- ☑ Renewable energy generation

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

National

## (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

✓ United States of America

## (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

✓ Support with minor exceptions

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

The Inflation Reduction Act extended existing renewable tax credits, made additional technologies eligible for the credits, and provided for the transition to technology-neutral tax credits later this decade. PPL worked directly with lawmakers and through our trade associations to express support for the legislation.

Following its enactment, PPL has worked with the U.S. Treasury, directly with and through our trade associations, to help ensure that the new law is implemented in a way that provides the maximum benefit for these credits.

## (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

- Regular meetings
- Ad-hoc meetings
- ☑ Responding to consultations
- ☑ Submitting written proposals/inquiries

# (4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

The Inflation Reduction Act is not central to PPL's achievement of its climate transition plan. It is, however, key to ensuring that the transition is affordable for our customers.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

#### Select from:

✓ Yes, we have evaluated, and it is aligned

## Row 2

## (4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

EPA Greenhouse Gas Emissions regulations

## (4.11.1.2) Environmental issues the policy, law, or regulation relates to

Select all that apply

✓ Climate change

## (4.11.1.3) Focus area of policy, law, or regulation that may impact the environment

## **Energy and renewables**

- ✓ Low-carbon, non-renewable energy generation
- ✓ New fossil fuel energy generation capacity

## (4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

National

## (4.11.1.5) Country/area/region the policy, law, or regulation applies to

Select all that apply

✓ United States of America

# (4.11.1.6) Your organization's position on the policy, law, or regulation

Select from:

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

PPL supports environmental rules that keep energy reliable and affordable for our customers and communities throughout the clean energy transition, and the company recognizes EPA's authority to regulate greenhouse gas emissions under the Clean Air Act. The policies we support will enable PPL to sustainably manage its energy resource portfolio, have a realistic pathway to implementation, and consider relevant technological, economic, legal and regulatory dynamics. As proposed, EPA rules setting emissions limits for new and existing fossil fuel power plants require adoption of unproven technologies within an unrealistically tight timeframe. Doing so jeopardizes a sustainable clean energy transition.

# (4.11.1.8) Type of direct engagement with policy makers on this policy, law, or regulation

Select all that apply

- Regular meetings
- ✓ Ad-hoc meetings
- ✓ Responding to consultations
- ☑ Submitting written proposals/inquiries

(4.11.1.9) Funding figure your organization provided to policy makers in the reporting year relevant to this policy, law, or regulation (currency)

0

(4.11.1.10) Explain the relevance of this policy, law, or regulation to the achievement of your environmental commitments and/or transition plan, how this has informed your engagement, and how you measure the success of your engagement

EPA greenhouse gas emission regulations will impact generation plans and the ability to reliably and affordably provide energy to customers.

(4.11.1.11) Indicate if you have evaluated whether your organization's engagement on this policy, law, or regulation is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is not aligned [Add row]

(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.

## Row 1

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

## (4.11.2.4) Trade association

#### **North America**

✓ Edison Electric Institute (EII)

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

✓ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

✓ Yes, we publicly promoted their current position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

With respect to climate, EEI's policy priorities in 2023 included:

- 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.

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 on the Executive Committee as of June 2023) 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-Federal Government Relations is on the Federal Affairs Executive Advisory Committee. See EEI's Public Policy website for additional information. https://www.eei.org

## (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

1582791

# (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

EEI provides public policy leadership, strategic business intelligence, and essential conferences and forums for investor-owned utilities in the United States. EEI also coordinates key reliability and resilience efforts, including mutual assistance and spare transformer programs. PPL's funding supports EEI's mission as it furthers the company's mission to provide safe, affordable, reliable and sustainable energy to customers and competitive, long-term returns to shareowners.

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

### Row 2

## (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

## (4.11.2.4) Trade association

#### **North America**

☑ American Gas Association

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

✓ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

✓ Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their 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 The AGA Board annually sets the association's advocacy priorities and adjusts them as needed throughout the year.

PPL's Senior Vice President and Chief Operations Officer-Utilities 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.

## (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

323864

# (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

AGA educates the public about the importance of natural gas, support natural gas utilities in our efforts to make operations safer, more efficient and more environmentally friendly, and serve as a resource for local, state and federal policymakers when it comes to regulating the natural gas industry.

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

## Row 3

## (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

## (4.11.2.4) Trade association

#### **North America**

✓ Other trade association in North America, please specify: WIRES

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

✓ Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

WIRES is a non-profit trade association with an international membership, that promotes investment in the North American electric transmission system, robust and effective transmission solutions to economic, environmental, and reliability challenges, and the reduction or elimination of uneconomic barriers to transmission development.

This mission is accomplished through the development and dissemination of information, strategic advocacy, and innovation in regulatory, policy making, industry, and educational forums. WIRES policy goals are set by the Board annually and adjusted as needed to align with federal regulatory activity impacting the industry and member priorities. PPL is an active member of WIRES and currently serves as WIRES board vice president.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

# (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

PPL's membership in WIRES is to promote those policies that will enable the build out of transmission to support the company's reliability, resilience, and clean energy transition goals.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ Yes, we have evaluated, and it is aligned

## Row 4

## (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

## (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: Energy Association of Pennsylvania

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Mixed

# (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

✓ Yes, and they have changed their position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their 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. 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.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

206048

# (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

EAP seeks to promote policy conducive to a strong business environment and safe, reliable and affordable energy with a focus on regulated gas and electric distribution utilities and their customers. While the industry has not adopted a position directly related to climate policy, we have successfully influenced the organization to have open policy discussions at the state level on related matters such as alternative energy portfolio standards. We evaluate consistency with the company's positions.

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals



✓ No, we have not evaluated

## Row 5

# (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

## (4.11.2.4) Trade association

#### **North America**

☑ Other trade association in North America, please specify: Northeast Energy and Commerce Association (NECA)

# (4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

✓ Climate change

# (4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

# (4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

✓ Yes, we publicly promoted their current position

# (4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

NECA advocates for environmentally sound, reliable and cost-effective wholesale and retail markets for the production and delivery of electric power supply, as well as competing energy services and resources alternatives, including conservation, innovative demand side and power delivery technologies, renewable energy and distributed generation.

## (4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

3500

# (4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

NECA is the oldest and most broad-based, trade association Northeast US energy sector. We evaluate consistency with the company's positions.

# (4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ No, we have not evaluated

## Row 6

## (4.11.2.1) Type of indirect engagement

Select from:

✓ Indirect engagement via a trade association

# (4.11.2.4) Trade association

#### **North America**

✓ Other trade association in North America, please specify: RENEW Northeast

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

Climate change

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

✓ Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

RENEW works to create and strengthen the public policies that will lead to the development and integration of high levels of renewable energy production for the benefit of the northeast region.

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

35000

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

✓ No, we have not evaluated [Add row] (4.12.1) Provide details on the information published about your organization's response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

## Row 1

# (4.12.1.1) **Publication**

Select from:

✓ In mainstream reports, in line with environmental disclosure standards or frameworks

## (4.12.1.2) Standard or framework the report is in line with

Select all that apply

- ☑ GRI
- IFRS
- ✓ TCFD

## (4.12.1.3) Environmental issues covered in publication

Select all that apply

- ✓ Climate change
- ✓ Water
- ☑ Biodiversity

# (4.12.1.4) Status of the publication

Select from:

Complete

# (4.12.1.5) Content elements

Select all that apply

Strategy

✓ Value chain engagement

- ☑ Governance
- Emission targets
- ✓ Emissions figures
- ☑ Risks & Opportunities
- ☑ Other, please specify : Employees, energy efficiency

- ✓ Dependencies & Impacts
- ☑ Biodiversity indicators
- ✓ Public policy engagement
- ✓ Content of environmental policies

## (4.12.1.7) Attach the relevant publication

PPL\_Corporation\_2023-Sustainability-Report\_FINAL.pdf

## (4.12.1.8) Comment

This annual Sustainability Report has been prepared with reference to the Global Reporting Initiative (GRI) Standards including the GRI Electric Utility Sector Supplement. We have also addressed topics identified in the Sustainability Accounting Standards Board (SASB) Electric Utilities and Power Generators and Gas Utilities and Distributors Standards, as well as recommendations from the Task Force on Climate-related Financial Disclosures (TCFD).

Our views about the company's direct and indirect impacts, risks, challenges and opportunities are presented throughout this report and in other publicly available documents.

This report covers activities that occurred in calendar year 2023 and contains the best information available at the time of publication. Unless otherwise noted, figures reported are through Dec. 31, 2023.

Environmental, social and governance data can be challenging to accurately measure. We correct and report errors in prior-year data when found, and we work to continually improve our data measurement, gathering and reporting processes to support the integrity of information presented.

The report is reviewed by the company's leadership team, including the chief executive officer. The Corporate Audit department has conducted reviews related to the compilation of this report, including in-depth reviews of specific metrics, as part of ongoing controls related to voluntary sustainability reporting.

An external audit has not been conducted. [Add row]

## C5. Business strategy

## (5.1) Does your organization use scenario analysis to identify environmental outcomes?

## Climate change

## (5.1.1) Use of scenario analysis

Select from:

Yes

# (5.1.2) Frequency of analysis

Select from:

✓ Every three years or less frequently [Fixed row]

(5.1.1) Provide details of the scenarios used in your organization's scenario analysis.

## Climate change

# (5.1.1.1) Scenario used

### **Climate transition scenarios**

☑ Customized publicly available climate transition scenario, please specify: TCFD

## (5.1.1.3) Approach to scenario

Select from:

✓ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

Select from:

✓ Organization-wide

## (5.1.1.5) Risk types considered in scenario

Select all that apply

Policy

Market

✓ Liability

Reputation

Technology

Acute physical

Chronic physical

# (5.1.1.6) Temperature alignment of scenario

Select from:

✓ 1.5°C or lower

## (5.1.1.9) Driving forces in scenario

## Local ecosystem asset interactions, dependencies and impacts

- ☑ Changes to the state of nature
- ✓ Number of ecosystems impacted
- ☑ Changes in ecosystem services provision
- ☑ Speed of change (to state of nature and/or ecosystem services)
- ✓ Climate change (one of five drivers of nature change)

### Finance and insurance

- ✓ Cost of capital
- ☑ Sensitivity of capital (to nature impacts and dependencies)
- ☑ Other finance and insurance driving forces, please specify :Stakeholder and customer demands

#### Stakeholder and customer demands

✓ Consumer sentiment

## :Affordability and reliability

- ☑ Consumer attention to impact
- ✓ Impact of nature footprint on reputation
- ☑ Sensitivity to inequity of nature impacts
- ☑ Impact of nature service delivery on consumer

☑ Other stakeholder and customer demands driving forces, please specify

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

Our 2021 climate assessment report takes a company-wide view of transition scenarios including a scenario consistent with limiting global temperature to 1.5C. As emissions from generation resources that we own represent the largest component of PPL's carbon emissions footprint and corporate-wide CO2e reduction goal, much of the 2021 analysis was focused on three distinct future generation-related transition scenarios that consider PPL's owned generation emissions and future resource mix:

- A Current Policies Scenario establishing PPL's future carbon emissions trajectory and potential range of reductions assuming no new regulatory requirements.
- A 1.5C Scenario benchmarking the range of reductions against an Intergovernmental Panel on Climate Change (IPCC) global climate mitigation pathway.
- A Fast Transition Future Policy Scenario benchmarking the range of reductions and forecasted resource mix against the expected contribution pathway for the power sector under the U.S. Nationally Determined Contributions (NDC) to the Paris Agreement.

These scenarios are designed to describe possible future states and potential implications for PPL within those future states. While grounded in plausible assumptions, PPL's scenarios and forecasts are not specific predictors of the future and do not constitute future business plans. The results of our climate scenario analysis and assessment are shown in the section of 2021 Climate Assessment titled, "Results and Implications for Our Business."

## Climate change

## (5.1.1.1) Scenario used

#### Climate transition scenarios

☑ Customized publicly available climate transition scenario, please specify

## (5.1.1.3) Approach to scenario

Select from:

✓ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

#### Select from:

✓ Organization-wide

# (5.1.1.5) Risk types considered in scenario

### Select all that apply

- Policy
- Market
- Liability
- Reputation
- Technology

- Acute physical
- Chronic physical

# (5.1.1.6) Temperature alignment of scenario

#### Select from:

**✓** 1.5°C or lower

# (5.1.1.9) Driving forces in scenario

## Local ecosystem asset interactions, dependencies and impacts

- ☑ Changes to the state of nature
- ✓ Number of ecosystems impacted
- ☑ Changes in ecosystem services provision
- ☑ Speed of change (to state of nature and/or ecosystem services)
- ✓ Climate change (one of five drivers of nature change)

#### Finance and insurance

- ✓ Cost of capital
- ☑ Sensitivity of capital (to nature impacts and dependencies)

#### Stakeholder and customer demands

Consumer sentiment

## :Affordability and reliability

- ☑ Consumer attention to impact
- ✓ Impact of nature footprint on reputation
- ✓ Sensitivity to inequity of nature impacts
- ☑ Impact of nature service delivery on consumer

### Macro and microeconomy

- ✓ Domestic growth
- ✓ Globalizing markets

✓ Other stakeholder and customer demands driving forces, please specify

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

Across our enterprise, PPL's operating companies conduct T&D planning each year to maintain compliance with 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 focuses on strengthening 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. PPL Electric, RIE, and LG&E and KU use a five-year asset planning model to prioritize T&D capital allocation, as well as operation and maintenance activities.

PPL Electric also projects a 10-year plan that is submitted to the PJM Interconnection, the regional transmission operator, for inclusion in PJM's annual Regional Transmission Expansion Plan (RTEP) process. RTEP identifies system additions and improvements needed to keep power flowing reliably throughout the PJM region.

LG&E and KU develop a 10-year Transmission Expansion Plan, coordinating closely with their independent operator, TranServ International Incorporated; their Stakeholder Planning Committee; and their reliability coordinator, the TVA, to ensure the companies' ability to meet existing and future requirements. In addition, they actively participate in the Southeast Regional Transmission Planning process. Planning approach focused on requirements for Kentucky IRP - identification of future scenarios to reliably meet load at the lowest cost.

While not directly assessed against a transition pathway as part of the IRP process, the scenario planning was an input to PPL's Climate Assessment Report scenario analysis. T&D planning considers a wide variety of factors, including load forecasts, facility ratings, expected generation, data received from customers regarding their load growth, inputs from severe weather events, and insights gained from analyzing the increasing amount of data we can collect to monitor changing conditions on the energy grid and assess the adequacy of our systems and equipment.

RIE incorporates a which undergoes yearly revisions to align with actual customer technology adoption and with existing and emerging state programs,, including climate related programs and recently proposed a grid modernization plan which proposes a number of visibility and control investments to handle a variety of possible climate scenarios.

## Climate change

# (5.1.1.1) Scenario used

#### **Climate transition scenarios**

☑ Customized publicly available climate transition scenario, please specify: TCFD

# (5.1.1.3) Approach to scenario

Select from:

✓ Qualitative and quantitative

## (5.1.1.4) Scenario coverage

Select from:

✓ Organization-wide

# (5.1.1.5) Risk types considered in scenario

Select all that apply

Policy

Market

Liability

Reputation

Technology

Chronic physical

# (5.1.1.6) Temperature alignment of scenario

Select from:

# (5.1.1.9) Driving forces in scenario

### Local ecosystem asset interactions, dependencies and impacts

- ✓ Changes to the state of nature
- ✓ Number of ecosystems impacted
- ☑ Speed of change (to state of nature and/or ecosystem services)
- ✓ Climate change (one of five drivers of nature change)

#### Finance and insurance

- Cost of capital
- ☑ Sensitivity of capital (to nature impacts and dependencies)

#### Stakeholder and customer demands

- ✓ Consumer sentiment
- ✓ Consumer attention to impact
- ☑ Other stakeholder and customer demands driving forces, please specify: Affordability and reliability

## Macro and microeconomy

✓ Domestic growth

## (5.1.1.10) Assumptions, uncertainties and constraints in scenario

In Kentucky, LG&E and KU routinely evaluate the best ways to serve customers under a wide range of scenarios. The integrated resources planning (IRP) process begins with 30-year forecasts of customers' energy needs.

LG&E and KU use information from a variety of sources to develop reasonable long-term forecasts that reflect not only the quantity of electricity required, but also the hour-by-hour demand. The companies' load forecast models consider such factors as weather conditions, daily usage patterns, future economic activity, population, and potential adoption rates of demand-side management programs, electric vehicles, private solar generation, energy efficiency measures and more. Seasonal and daily variability of customers' energy needs drive the development of a generation portfolio that can reliably meet customers' needs in every hour of the year and under a broad range of weather conditions. For example, over the course of the year, approximately 50% of customers' energy needs occur at night when solar power is not generating electricity, with up to 65% occurring at night during the winter months.

Considering all the above factors, LG&E and KU submit an IRP to the Kentucky Public Service Commission (KPSC) once every three years, as required. However, the companies annually review and update their plan to reflect the latest information and forecasts and must affirm the adequacy of their resources annually in filings with the KPSC. As a result of LG&E and KU's attention to planning and maintenance, the companies have demonstrated sustained excellence in generation reliability in recent years, reflecting top-quartile performance in its equivalent forced outage rates that are well below industry averages as tracked by ReliabilityFirst Corporation. Seasonal and daily variability of customers' energy needs drive the development of a generation portfolio that can reliably meet customers' needs in every hour of the year and under a broad range of weather conditions.

[Add row]

#### (5.1.2) Provide details of the outcomes of your organization's scenario analysis.

#### Climate change

#### (5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

- ☑ Risk and opportunities identification, assessment and management
- ✓ Strategy and financial planning
- ☑ Resilience of business model and strategy
- ☑ Target setting and transition planning

#### (5.1.2.2) Coverage of analysis

Select from:

✓ Organization-wide

#### (5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

PPL used transition climate scenario analysis to benchmark our progress to reduce the company's generation-related carbon emissions against 1.5Celsius emission pathways and Paris Agreement-aligned commitments. A full description of that analysis and findings can be found on pages 16-22 of PPL's Climate Assessment Report (https://www.pplweb.com/wpcontent/uploads/2022/01/PPL\_Corp-2021-Climate-Assessment\_2022-01-04.pdf).
[Fixed row]

#### (5.2) Does your organization's strategy include a climate transition plan?

#### (5.2.1) Transition plan

Select from:

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

#### (5.2.3) Publicly available climate transition plan

Select from:

Yes

# (5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

Select from:

✓ No, and we do not plan to add an explicit commitment within the next two years

# (5.2.6) Explain why your organization does not explicitly commit to cease all spending on and revenue generation from activities that contribute to fossil fuel expansion

PPL is affordably and reliably transitioning our generation fleet to cleaner sources, while reducing carbon intensity and absolute emissions. We continue to assess the dynamic energy landscape to identify opportunities to economically support this transition.

In Kentucky, LG&E and KU have received regulatory approval to retire 600 megawatts of aging coal-fired generation and more than 50 megawatts of peaking units; construct a new 640 megawatt combined-cycle natural gas plant; and add more than 1,000 megawatts of solar generation and energy storage. Once concluded, these actions will reduce the company's carbon intensity by more than 20%.

To advance the cleaner energy transition, we are working on modernizing our electric grids and gas LDC networks enterprise-wide. As our aging coal-fired plants retire, new baseload generation will be needed for load support. There are currently two options that are regionally available — natural gas and nuclear. Due to the lengthy process for planning, regulatory approvals and construction, a nuclear plant is not currently a viable option. Natural gas is the more readily available option for replacement of baseload generation and has the added benefit of being able to ramp up and down quickly. This flexibility is necessary as intermittent resources make up a greater portion of the generation portfolio.

#### (5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

Select from:

☑ We have a different feedback mechanism in place

#### (5.2.8) Description of feedback mechanism

Feedback is presented at quarterly earnings meetings and annual shareowner meetings. Additionally, PPL holds meetings with investors throughout the year in one-on-one meetings, at financial conferences and through a focused fall shareowner outreach to ESG/Stewardship teams. The meetings contain information on PPL's business review, financial progress and environmental, social and governance updates (https://investors.pplweb.com/events).

### (5.2.9) Frequency of feedback collection

Select from:

✓ More frequently than annually

#### (5.2.10) Description of key assumptions and dependencies on which the transition plan relies

Please see attachments for in-depth transition plan that describes our key assumptions and dependencies.

#### (5.2.11) Description of progress against transition plan disclosed in current or previous reporting period

We continue to make progress toward our goal to achieve net-zero carbon emissions by 2050, having reduced carbon emissions nearly 59% from 2010 levels. We are also on track to achieve our interim targets of a 70% reduction by 2035 and an 80% reduction by 2040. Maintaining reliability and affordability is a critical component to achieving net-zero emissions as we economically decarbonize our generation fleet in Kentucky.

We continue to assess the dynamic energy landscape to identify opportunities to economically support this transition. In Kentucky, LG&E and KU have received regulatory approval to retire 600 megawatts of aging coal-fired generation and more than 50 megawatts of peaking units; construct a new 640 megawatt combined cycle natural gas plant; and add more than 1,000 megawatts of solar generation and energy storage. Once concluded, these actions will reduce the company's carbon intensity by more than 20%. To advance the cleaner energy transition, we are working on modernizing our electric grids and gas LDC networks enterprisewide.

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

PPL\_Corp-2022-Generation-Study-FINAL.pdf,PPL\_Corp-2021-Climate-Assessment\_2022-01-04.pdf,PPL\_Corporation\_2023-Sustainability-Report\_FINAL.pdf

## (5.2.13) Other environmental issues that your climate transition plan considers

Select all that apply

☑ No other environmental issue considered [Fixed row]

#### (5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

#### (5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

Select from:

✓ Yes, both strategy and financial planning

## (5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

Select all that apply

- Products and services
- ✓ Upstream/downstream value chain
- ✓ Investment in R&D
- Operations

[Fixed row]

#### (5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

#### **Products and services**

#### (5.3.1.1) Effect type

Select all that apply

- Risks
- Opportunities

## (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

#### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

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. The subscription-based Solar Share program is available to residential, business and industrial customers who want to support solar energy. More than 2,800 LG&E and KU customers across Kentucky have enrolled in the program. Upon completion, the Solar Share facility will have eight sections and a total capacity of 4 megawatts.

PPL Electric's user-friendly Renewable Energy Connection website makes it easier for customers to apply to connect solar panels and other generation systems to the grid. Since deploying the portal in 2018, the company has received 5,000 applications for connection, processing 90% of those within 24 hours.

RIE contributed 2.5 million to support the Rhode Island Commerce Corporation's Renewable Energy Fund (REF), which provides grants for renewable energy projects that have the potential to produce electricity in a cleaner, more sustainable manner. These grants also help stimulate job growth in the green technology and energy sectors. RIE also offers two customer programs to encourage local renewable energy connections. RIE also offers two customer programs to encourage local renewable energy connections. About 620 megawatts of renewable energy nameplate capacity has been connected by year-end 2023.

#### **Upstream/downstream value chain**

#### (5.3.1.1) Effect type

Select all that apply

✓ Risks

Opportunities

## (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

## (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

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 2023, PPL proposed to the Kentucky PSC to economically retire 1500 megawatts of fossil generation and replace it with a mix cleaner energy resource – a combination of new gas and solar generation, energy storage and customer demand-side management. The Commission ultimately approved the retirement of approximately 600 megawatts of aging coal generation and more than 50 megawatts of aging peaking natural gas units, and replace it with one approximately 640 megawatt combined-cycle natural gas plant, approximately 1000 megawatts of solar (both owned and contracted), 125 megawatt of battery storage and implement more than a dozen new energy efficiency programs. Once the generation retirements and additions approved by the commission are complete, this new generation mix, PPL expects the carbon intensity of its fleet to be 20% lower than in 2021, and total company carbon emissions to be 65% below our 2010 baseline. Additionally, LG&E and KU executed two purchased power agreements ("PPA") in 2020 and 2021 for a combined 225 megawatts of solar generation. These PPAs support our customers' interest in renewable generation and will enable us to meet our obligations to serve our Kentucky customers' energy needs in the most reliable, least-cost fashion.

The state of Rhode Island has adopted aggressive clean energy goals including reaching net-zero carbon emissions by 2050 and achieving 100% renewable energy by 2033. In 2023 RIE issued a request for proposals for a long-term contract capacity for 1200 MW of off-shore wind energy.

#### **Investment in R&D**

#### (5.3.1.1) Effect type

Select all that apply

Risks

Opportunities

#### (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

✓ Climate change

#### (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

As of April 2024, PPL was engaged in more than 150 active research projects, with more than 100 million in active federal funding, steering key industry partnerships and collaborating with industry and academia to enable decarbonization, advance clean energy technology, strengthen grid resilience and explore energy storage.

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 serves as an anchor sponsor of the Low Carbon Resources Initiative, a five-year initiative led by EPRI and Gas Technology Institute to collaborate on identifying, developing and demonstrating affordable pathways to economy-wide decarbonization. PPL's CEO is first chair of EPRI's board of directors.

We have also created innovative partnerships with academia across all of our territories, including our longstanding partnership with the University of Kentucky's Institute for Decarbonization and Energy Advancement (IDEA) at the PPL R&D Center.

PPL joined Climate READi, a three-year initiative launched by EPRI to address energy system climate resilience and adaptation as extreme weather events continue to increase. The collaborative effort is focused on strengthening grid resilience against potential climate and weather impacts. RIE is piloting two battery-energy storage systems to improve resiliency and performance. The systems are designed to store electrical energy during low-usage periods to be utilized when needed, one front-of-the-meter system to aid during outages and one behind-the-meter system that can be charged/discharged daily to provide additional power at peak times.

#### **Operations**

#### (5.3.1.1) Effect type

Select all that apply

Risks

Opportunities

## (5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

Climate change

## (5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

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 balances reliability and affordability in transition to clean energy. Impacts to RIE's gas distribution system are being assessed as part of a regulatory proceeding mentioned in other areas of this CDP response.

[Add row]

#### (5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

#### Row 1

#### (5.3.2.1) Financial planning elements that have been affected

Select all that apply

Assets

Revenues

Liabilities

✓ Direct costs

✓ Indirect costs

Access to capital

☑ Capital allocation

Capital expenditures

#### (5.3.2.2) Effect type

Select all that apply

Risks

Opportunities

# (5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

Climate change

#### (5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

PPL has adopted a clean energy transition strategy that positions the company to be a clean energy leader in the regions that we serve. Our transition strategy is centered around four key areas that we believe will enable us to advance new opportunities for the company and help deliver a net-zero economy by 2050:

- Decarbonize our generation.
- Decarbonize our non-generation operations.
- Drive Digital Innovation and R&D to Enable New Technologies.
- Position the Grid as an Enabler for Clean Energy Resources and Drive Energy Efficiency and Demand Side Management.

Our commitment to achieve net-zero carbon emissions by 2050 is backed by the actions that we are taking and will continue to take to support a low-carbon energy system that is affordable and reliable for our customers and provides the time needed for technology to advance.

Our rigorous capital expenditure program is designed to deliver long-term value for our stakeholders and align with our corporate strategy, including our clean energy strategy described elsewhere in this report. PPL's 14.3 billion regulated capital investment plan from 2024 to 2027 is focused on grid modernization and resiliency throughout our service territories and generation transition in Kentucky. A significant portion of our investments in infrastructure improvements has been focused on incorporating new technology and hardening transmission and distribution systems.

[Add row]

# (5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

## (5.5.1) Investment in low-carbon R&D

Select from:

Yes

#### (5.5.2) Comment

PPL participates in approximately 150 research and development activities, including company research, industry-wide studies and partnerships with educational institutions and research organizations. Our 2023 R&D activities included:

- Leveraging 425,000 in company cost share for approximately 6.7 million in Department of Energy.
- Serving as an anchor sponsor of the Low Carbon Resources Initiative, led by the Electric Power Research Institute (EPRI) and Gas Technology Institute to help accelerate research and development of low-carbon and zero-carbon technologies and demonstrating affordable pathways to economy-wide decarbonization, such as advanced nuclear, carbon capture, utilization and sequestration, hydrogen, ammonia, synthetic fuels and biofuels. Research also includes assessing low-carbon pathways for producing, transporting and storing these energy carriers, as well as opportunities to use them in power generation, transportation and other applications.
- Creating innovative partnerships with academia including our longstanding partnership with the University of Kentucky's Institute for Decarbonization and Energy Advancement at the PPL R&D Center. The research aims to develop a flexible, net negative CO2 emissions technology that will be directly applicable to natural gas combined cycle power generation while minimizing the associated capital costs of installing this technology. PPL works to replicate this model in organization wide.
- Partnering with EPRI on LG&E and KU's energy storage demonstration site, the first and largest utility-scale energy storage system in Kentucky. In its seventh year of operation, the battery is co-located with LG&E and KU's E.W. Brown solar facility allowing the company to explore how batteries can improve the inherent intermittency of solar power. PPL Research and Development has also partnered with the University of Kentucky on multiple projects focusing on safety and renewable integration with energy storage technology.

• Installation of Kentucky's first utility-scale wind turbine and two 360-degree tracking solar panels at the Renewable Integration Research Facility. Both installations will serve as research tools for analysis of power production, so that future generation potential from each source can be evaluated. This technology exploration is part of PPL's all-of-the-above strategy for decarbonization.

[Fixed row]

# (5.5.7) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

#### Row 1

#### (5.5.7.1) Technology area

Select from:

☑ Other, please specify: Difficult to Electrify End Use decarbonization and zero emission electricity generation

#### (5.5.7.2) Stage of development in the reporting year

Select from:

☑ Basic academic/theoretical research

#### (5.5.7.3) Average % of total R&D investment over the last 3 years

20

#### (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

112000

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

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.

#### Row 2

#### (5.5.7.1) Technology area

Select from:

☑ Battery storage

#### (5.5.7.2) Stage of development in the reporting year

Select from:

☑ Pilot demonstration

#### (5.5.7.3) Average % of total R&D investment over the last 3 years

20

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

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. 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.

#### Row 3

#### (5.5.7.1) Technology area

Select from:

☑ Carbon capture, utilization, and storage (CCUS)

#### (5.5.7.2) Stage of development in the reporting year

Select from:

✓ Pilot demonstration

#### (5.5.7.3) Average % of total R&D investment over the last 3 years

20

#### (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

230000

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

In 2006, LG&E and KU founded the carbon capture program at the University of Kentucky (UK) and continue to partner with the US Department of Energy (DOE) and Electric Power Research Institute (EPRI) on this important research. In 2014, we deployed the capture technology that the team developed in a pilot-scale carbon capture unit at the E.W. Brown Generating Station, which is one of a few power plants in the United States today with an active carbon capture system. This joint research at our site has lowered capture costs by forty percent and led to numerous patents and academic publications. In 2021, LG&E and KU continue to partner with UK studying carbon capture with natural gas using the existing carbon capture system at E.W. Brown leveraging 3.7m in federal funding in 2021. The next stage of this research will be to demonstrate carbon capture at LG&E and KU's Cane Run Station, a natural gas combined cycle plant, through a 103M project which the DOE awarded PPL 72M for in 2024. We are also working with our partners at UK, DOE, and EPRI's Low Carbon Resource Initiative (LCRI) on hydrogen production and direct air capture technology capable of 90% carbon capture while producing 99.9% purity hydrogen gas.

#### Row 4

#### (5.5.7.1) Technology area

Select from:

☑ Battery storage

#### (5.5.7.2) Stage of development in the reporting year

Select from:

✓ Applied research and development

#### (5.5.7.3) Average % of total R&D investment over the last 3 years

20

## (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

320500

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

LG&E and KU Energy operates Kentucky's first and largest utility-scale energy storage system — a 1-megawatt, 2-megawatt-hour lithium-ion battery. The battery is co-located with E.W. Brown Solar, allowing the company to explore how batteries can improve the inherent intermittency of solar power. The battery is operated 24/7, 365 days a year and is continuously collecting data — typically charging during the day when solar power is available and discharging at night. Academic publications, and research on battery safety, degradation, recycling and automation. As energy storage applications and deployments continue to increase, this research will provide valuable knowledge for larger battery systems. Researchers from the University of Kentucky Power and Energy institute of Kentucky (PEIK) and the PPL Research & Development team are also analyzing the benefits and applications of integrated energy storage systems for increased Kentucky renewable generation.

#### Row 5

#### (5.5.7.1) Technology area

Select from:

✓ Solar energy generation

#### (5.5.7.2) Stage of development in the reporting year

Select from:

☑ Basic academic/theoretical research

## (5.5.7.3) Average % of total R&D investment over the last 3 years

#### (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

450000

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Researchers from the University of Kentucky Power and Energy institute of Kentucky (PEIK) and the PPL Research & Development department have analyzed the impact of large solar PV penetration on the companies' generation portfolio. Using historical solar irradiance profiles from multiple sites distributed across the state of Kentucky, the study was able to estimate the maximum amount of intermittent renewable energy sources the service area can sustain with the existing infrastructure. Solar PV generation exceeding 1,000 MW requires significant changes to the portfolio that includes fast-ramping natural gas units and additional transmission infrastructure.

#### Row 6

#### (5.5.7.1) Technology area

Select from:

✓ Solar energy generation

#### (5.5.7.2) Stage of development in the reporting year

Select from:

✓ Pilot demonstration

#### (5.5.7.3) Average % of total R&D investment over the last 3 years

20

#### (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

100000

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Two 360-degree tracking solar panels were installed at the Renewable Integration Research Facility at EW Brown. These panels differ from the panels present in the neighboring 10MW solar field because they are able to track the sun as it moves across the sky throughout the day, thereby improving power-producing capabilities. These panels are more costly than their counterparts, so research and analysis of the functioning of these 4.92kW panels is important for helping to determine how cost effective these panels are for broader utility use.

#### Row 7

#### (5.5.7.1) Technology area

Select from:

✓ Wind energy generation

#### (5.5.7.2) Stage of development in the reporting year

Select from:

✓ Full/commercial-scale demonstration

#### (5.5.7.3) Average % of total R&D investment over the last 3 years

20

## (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

750000

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PPL Research and Development installed Kentucky's first utility-scale wind turbine at the Renewable Integration Research Facility in 2023. This 90 kW turbine is being used to evaluate the potential for wind energy to contribute to Kentucky's renewable energy portfolio. This deployment, and subsequent research efforts, will be key to paving the way for further wind generation in the state.

#### Row 8

#### (5.5.7.1) Technology area

Select from:

✓ Wind energy generation

#### (5.5.7.2) Stage of development in the reporting year

Select from:

✓ Applied research and development

#### (5.5.7.3) Average % of total R&D investment over the last 3 years

20

#### (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

90000

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PPL Research and Development is collaborating with our partner, the University of Kentucky, to study the wind energy generation potential with a view at power system integration capabilities in Kentucky, Pennsylvania, and Rhode Island, states for which the PPL Corporation provides electric utilities. The research includes systematic reviews of research reports and simulations of wind turbine generators and their combination with batteries for energy storage, and new hydrogen infrastructure with a view at power system integration. This will assist in planning for future deployments of renewable energy.

#### Row 9

#### (5.5.7.1) Technology area

Select from:

✓ Other, please specify: Geothermal energy

#### (5.5.7.2) Stage of development in the reporting year

Select from:

☑ Basic academic/theoretical research

#### (5.5.7.3) Average % of total R&D investment over the last 3 years

20

#### (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

50000

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PPL Research and Development is collaborating with our partner, the University of Kentucky, to research and test materials for geothermal energy applications. Research and Developments all of the above technology strategy includes evaluating geothermal applications for carbon free energy.

#### **Row 10**

#### (5.5.7.1) Technology area

Select from:

✓ Other, please specify : Hydrogen

#### (5.5.7.2) Stage of development in the reporting year

Select from:

☑ Basic academic/theoretical research

#### (5.5.7.3) Average % of total R&D investment over the last 3 years

20

#### (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

50000

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PPL Research and Development collaborated with our partner, Battelle, to study the feasibility of hydrogen in Kentucky and neighboring states. The coalition included major utility companies Dominion Energy, Duke Energy, Louisville Gas & Electric Company and Kentucky Utilities Company (LG&E and KU), Southern Company and the Tennessee Valley Authority (TVA), along with Battelle and others.

#### **Row 11**

#### (5.5.7.1) Technology area

Select from:

▼ Other, please specify :Electric vehicles

#### (5.5.7.2) Stage of development in the reporting year

Select from:

☑ Basic academic/theoretical research

## (5.5.7.3) Average % of total R&D investment over the last 3 years

20

#### (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

50000

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PPL Research and Development collaborated with our partner, Battelle, to study the feasibility of hydrogen in Kentucky and neighboring states. The coalition included major utility companies Dominion Energy, Duke Energy, Louisville Gas & Electric Company and Kentucky Utilities Company (LG&E and KU), Southern Company and the Tennessee Valley Authority (TVA), along with Battelle and others.

#### **Row 12**

#### (5.5.7.1) Technology area

Select from:

☑ Carbon capture, utilization, and storage (CCUS)

#### (5.5.7.2) Stage of development in the reporting year

Select from:

✓ Applied research and development

#### (5.5.7.3) Average % of total R&D investment over the last 3 years

20

## (5.5.7.4) R&D investment figure in the reporting year (unit currency as selected in 1.2) (optional)

475000

# (5.5.7.6) Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

PPL has partnered with the University of Kentucky Institute for Decarbonization and Energy Advancement on direct air capture, net negative carbon dioxide emissions at a natural gas plant, and a Front-End Engineering Design (FEED) feasibility study for a carbon capture demonstration unit at Cane Run 7. The direct air capture project involves developing technology that will capture carbon dioxide directly from the air while producing hydrogen. The net negative carbon dioxide emissions project involves creating a flexible carbon capture system for use at natural gas combined cycle (NGCC) power plants that produces hydrogen gas, oxygen gas, and releases less carbon dioxide back into the air compared to ambient concentrations. In August 2022, the DOE awarded the company 5.8 million to perform a Front-End Engineering Design (FEED) at PPL's LG&E and KU Cane Run 7 is to study the feasibility of installing a 10 MWe demonstration unit at an existing NGCC power plant.

[Add row]

(5.7) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

Coal - hard

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

188000000

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

30.2

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

23.9

(5.7.4) Most recent year in which a new power plant using this source was approved for development

2006

(5.7.5) Explain your CAPEX calculations, including any assumptions

2024-2028 CAPEX

Gas

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

344000000

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

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

54.2

(5.7.4) Most recent year in which a new power plant using this source was approved for development

2012

## (5.7.5) Explain your CAPEX calculations, including any assumptions

2024-2028 CAPEX. Includes two new NGCC's (one approved in previous CPCN filing with KPSC, one assuming approval in a future CPCN)

#### **Hydropower**

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

4000000

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

0.6

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

0.2

(5.7.4) Most recent year in which a new power plant using this source was approved for development

2005

#### (5.7.5) Explain your CAPEX calculations, including any assumptions

2024-2028 CAPEX.

Solar

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

54000000

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

8.7

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

13

(5.7.4) Most recent year in which a new power plant using this source was approved for development

2015

#### (5.7.5) Explain your CAPEX calculations, including any assumptions

2024-2028 CAPEX. Includes two new solar projects approved in previous CPCN filing with KPSC and additional solar share arrays.

Other renewable (e.g. renewable hydrogen)

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

32000000

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

5.1

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

8.6

(5.7.4) Most recent year in which a new power plant using this source was approved for development

2016

## (5.7.5) Explain your CAPEX calculations, including any assumptions

2024-2028 CAPEX. Includes new battery storage project approved in CPCN filing with the KPSC. [Fixed row]

(5.7.1) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Row 1

#### (5.7.1.1) Products and services

Select from:

Smart grid

#### (5.7.1.2) Description of product/service

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.

#### (5.7.1.3) CAPEX planned for product/service

626000000

## (5.7.1.4) Percentage of total CAPEX planned for products and services

92.9

## (5.7.1.5) End year of CAPEX plan

2028

#### Row 2

## (5.7.1.1) Products and services

Select from:

Lighting

#### (5.7.1.2) Description of product/service

LG&E and KU: Conversion of street lights to LED

## (5.7.1.3) CAPEX planned for product/service

11000000

## (5.7.1.4) Percentage of total CAPEX planned for products and services

1.6

## (5.7.1.5) End year of CAPEX plan

#### Row 3

## (5.7.1.1) Products and services

Select from:

✓ Electric vehicles

#### (5.7.1.2) Description of product/service

LG&E and KU: Electrification of fleet including installation of level 2 and level 3 charges and supporting fleet infrastructure to support charging of vehicles.

## (5.7.1.3) CAPEX planned for product/service

21000000

## (5.7.1.4) Percentage of total CAPEX planned for products and services

3.1

## (5.7.1.5) End year of CAPEX plan

2028

#### Row 4

#### (5.7.1.1) Products and services

Select from:

Charging networks

#### (5.7.1.2) Description of product/service

LG&E and KU: Electric vehicle charging stations (public, hosted, and fast chargers).

#### (5.7.1.3) CAPEX planned for product/service

1000000

## (5.7.1.4) Percentage of total CAPEX planned for products and services

0.1

## (5.7.1.5) End year of CAPEX plan

2028

Row 5

#### (5.7.1.1) Products and services

Select from:

✓ Other, please specify :Carbon capture

## (5.7.1.2) Description of product/service

LG&E and KU: Carbon capture project.

## (5.7.1.3) CAPEX planned for product/service

15000000

## (5.7.1.4) Percentage of total CAPEX planned for products and services

2.2

## (5.7.1.5) End year of CAPEX plan

2028

Row 6

#### (5.7.1.1) Products and services

Select from:

☑ Other, please specify: Gas circuit breaker replacement

#### (5.7.1.2) Description of product/service

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.

## (5.7.1.3) CAPEX planned for product/service

76500000

#### (5.7.1.4) Percentage of total CAPEX planned for products and services

75

#### (5.7.1.5) End year of CAPEX plan

2028

Row 7

#### (5.7.1.1) Products and services

Select from:

✓ Distributed generation

#### (5.7.1.2) Description of product/service

PPL Electric: In 2020, PPL Electric received approval from the Pennsylvania Public Utility Commission (PA PUC) to implement its DER Management Pilot Plan, which requires smart inverters for new DER installations starting in January 2021 and permits PPL Electric to conduct a 3-year pilot program to test and evaluate the costs and benefits of monitoring and actively managing DER smart inverters. At the end of 2023, 6,086 DER installations were participating in the pilot program.

#### (5.7.1.3) CAPEX planned for product/service

27500000

#### (5.7.1.4) Percentage of total CAPEX planned for products and services

10

## (5.7.1.5) End year of CAPEX plan

2028

Row 8

#### (5.7.1.1) Products and services

Select from:

✓ Smart grid

#### (5.7.1.2) Description of product/service

PPL Electric: The work associated with the development and installation of Smart Grid work will provide both reliability/operations benefits and CO2e 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 CO2e emissions from purchase of new assets.

#### (5.7.1.3) CAPEX planned for product/service

248000000

#### (5.7.1.4) Percentage of total CAPEX planned for products and services

#### (5.7.1.5) End year of CAPEX plan

2028

Row 9

## (5.7.1.1) Products and services

Select from:

✓ Electric vehicles

#### (5.7.1.2) Description of product/service

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.

#### (5.7.1.3) CAPEX planned for product/service

12500000

#### (5.7.1.4) Percentage of total CAPEX planned for products and services

4

#### (5.7.1.5) End year of CAPEX plan

2028

**Row 10** 

#### (5.7.1.1) Products and services

Select from:

☑ Other, please specify :Facility efficiency programs

#### (5.7.1.2) Description of product/service

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.

#### (5.7.1.3) CAPEX planned for product/service

2700000

#### (5.7.1.5) End year of CAPEX plan

2028

#### **Row 11**

## (5.7.1.1) Products and services

Select from:

Smart grid

#### (5.7.1.2) Description of product/service

PPL Electric became the first utility to energize a 69kV recloser on a transmission grid. The 69kV Transmission Recloser provides many benefits to the future clean energy grid. The Transmission 69kV recloser eliminates routine maintenance, enhances reliability, allows smart grid automation, utilizes clean-air vacuum technology, and compact footprint compared to alternative technologies. PPL EU is installing 69kV Transmission reclosers in place of switches and circuit breakers that typically utilize SF6. The 69kV recloser supports our corporate goals of Net Zero Emissions, hardening our infrastructure, and automating our grid to enhance grid resilience and reliability.

#### (5.7.1.3) CAPEX planned for product/service

25600000

#### (5.7.1.4) Percentage of total CAPEX planned for products and services

25

#### (5.7.1.5) End year of CAPEX plan

2028

#### **Row 12**

#### (5.7.1.1) Products and services

Select from:

✓ Smart grid

#### (5.7.1.2) Description of product/service

RIE: Devices and software associated with the Grid Modernization Plan docket include ADMS Advanced, Reclosers, Smart Capacitors, Regulators, IT Infrastructure, Electromechanical Relays, Fiber Network and Mobile Dispatch. The Company is not requesting approval of specific investments within the Grid Modernization Plan (GMP) Docket. The Company views the GMP as the validation for evolving its investment strategy, which will result in expanded investment proposals. Approval of proposed investments will go through appropriate evidentiary hearings in the relevant dockets, such as the annual ISR or future Rate Cases.

## (5.7.1.3) CAPEX planned for product/service

150117000

#### (5.7.1.4) Percentage of total CAPEX planned for products and services

8

#### (5.7.1.5) End year of CAPEX plan

2029

**Row 13** 

#### (5.7.1.1) Products and services

Select from:

✓ Smart grid

#### (5.7.1.2) Description of product/service

RIE: Advanced Meter Functionality filed with the RIPUC is the Company's proposal to install smart meter technology. This docket is pending approval.

## (5.7.1.3) CAPEX planned for product/service

151900000

## (5.7.1.4) Percentage of total CAPEX planned for products and services

19

#### (5.7.1.5) End year of CAPEX plan

2026

#### **Row 14**

## (5.7.1.1) Products and services

Select from:

✓ Distributed generation

#### (5.7.1.2) Description of product/service

RIE: Rhode Island Energy will be filing two petitions with the RIPUC for Acceleration of a System Modification Due to an Interconnection Request. If the Commission determines that a System Modification of the electric distribution system that was necessary for the Interconnecting customer also benefits all rate payers and has been accelerated due to the interconnection, the Interconnecting customer shall be entitled to repayment of the depreciated value of the modifications. These values include work to be completed at both the Tiverton and Weaver Hill substations and will be included in the ISR FY25 filing. These values were not included in BP23 so there is 0% of total CAPEX planned for products and services.

## (5.7.1.3) CAPEX planned for product/service

26000000

## (5.7.1.4) Percentage of total CAPEX planned for products and services

13

## (5.7.1.5) End year of CAPEX plan

2024 [Add row]

#### (5.10) Does your organization use an internal price on environmental externalities?

Use of internal pricing of environmental externalities	Environmental externality priced
Select from:  ✓ Yes	Select all that apply  ☑ Carbon

[Fixed row]

## (5.10.1) Provide details of your organization's internal price on carbon.

#### Row 1

# (5.10.1.1) Type of pricing scheme

Select from:

✓ Implicit price

#### (5.10.1.2) Objectives for implementing internal price

Select all that apply

✓ Influence strategy and/or financial planning

#### (5.10.1.3) Factors considered when determining the price

Select all that apply

☑ Cost of required measures to achieve climate-related targets

#### (5.10.1.5) Scopes covered

Select all that apply

✓ Scope 1

#### (5.10.1.6) Pricing approach used – spatial variance

Select from:

Uniform

#### (5.10.1.8) Pricing approach used – temporal variance

Select from:

✓ Static

#### (5.10.1.10) Minimum actual price used (currency per metric ton CO2e)

15

## (5.10.1.11) Maximum actual price used (currency per metric ton CO2e)

25

#### (5.10.1.12) Business decision-making processes the internal price is applied to

Select all that apply

- Capital expenditure
- ✓ Risk management

#### (5.10.1.13) Internal price is mandatory within business decision-making processes

Select from:

✓ No

#### (5.10.1.15) Pricing approach is monitored and evaluated to achieve objectives

Select from:

Yes

## (5.10.1.16) Details of how the pricing approach is monitored and evaluated to achieve your objectives

Used in LG&E and KU's integrated resources plan; assessment of environmental uncertainty regarding the impact of potential future CO2 regulations' implied cost on resource plans.
[Add row]

#### (5.11) Do you engage with your value chain on environmental issues?

	Engaging with this stakeholder on environmental issues	Environmental issues covered
Suppliers	Select from:  ✓ Yes	Select all that apply  ✓ Climate change
Customers	Select from: ✓ Yes	Select all that apply  ☑ Climate change
Investors and shareholders	Select from:	Select all that apply

Engaging with this stakeholder on environmental issues	Environmental issues covered
✓ Yes	✓ Climate change

[Fixed row]

# (5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?

#### Climate change

## (5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

✓ Yes, we assess the dependencies and/or impacts of our suppliers

## (5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

Select all that apply

☑ Other, please specify :Biodiversity and environmental management

# (5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

Select suppliers/contractors are involved in work that may impact the environment. Those are under contract to follow PPL's environmental procedures/requirements. [Fixed row]

#### (5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

#### Climate change

# (5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

✓ Yes, we prioritize which suppliers to engage with on this environmental issue

# (5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

☑ Regulatory compliance

# (5.11.2.4) Please explain

PPL's biodiversity management plan ensures compliance with all state and federal regulatory requirements related to habitat management, watershed management, biodiversity preservation and ecosystem restoration. This extends to select suppliers/contractors who would with us in these areas.

[Fixed row]

# (5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?

	Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process
Climate change	Select from:  ☑ No, and we do not plan to introduce environmental requirements related to this environmental
	issue within the next two years

[Fixed row]

# (5.11.7) Provide further details of your organization's supplier engagement on environmental issues.

# Climate change

# (5.11.7.2) Action driven by supplier engagement

Select from:

✓ Emissions reduction

# (5.11.7.3) Type and details of engagement

#### Innovation and collaboration

✓ Other innovation and collaboration activity, please specify: The PPL Electric's renewable obligation (set at 18%) is met through independent contracting for RECs – not through wholesale energy supplier contracts.

# (5.11.7.4) Upstream value chain coverage

Select all that apply

✓ Tier 1 suppliers

✓ Tier 2 suppliers

# (5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

**☑** 26-50%

## (5.11.7.8) Number of tier 2+ suppliers engaged

6

# (5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

For the June 2021 through May 2023 period, PPL Electric met its AEPS obligations through utilization of REC-only suppliers. As such, supplier outreach for renewable energy obligation support only occurs with those suppliers providing RECs – not PPL Electric's entire wholesale energy supplier base. Success is measured through the confirmation by the PA PUC AEPS Manager that the Company has supplied its required REC obligations. PPL Electric has met its REC obligations for every year, without fail, since its obligation began in 2010.

## Climate change

# (5.11.7.2) Action driven by supplier engagement

Select from:

✓ Emissions reduction

# (5.11.7.3) Type and details of engagement

#### Innovation and collaboration

☑ Other innovation and collaboration activity, please specify :RIE's renewable obligation (set at 23%) is met through a combination of RECS obtained from RIE Renewable Energy Programs and competitive REC RFPs. RIE is only obligated to meet the obligations for Last Resort Service customers.

# (5.11.7.4) Upstream value chain coverage

Select all that apply

✓ Tier 1 suppliers

# (5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

For the January 2023 through December 2023 period, RIE met it's RES obligations through utilization of REC obtained from RI Renewable Energy programs, such as REGrowth, Long-Term Contracting Standard, Distributed Generation, etc. These programs are responsible for providing RIE with the required amount of RI "New" RECs that are mandated under the RI RES.

RIE also conducts REC-only RFP auctions throughout the year that provides RIE with the required amount of RI "Existing" RECs mandated under the RI RES (through the utilization of REC-Only suppliers). Of note: RECs are only acquired for Last Resort Service obligations – not for all customers in the service territory (i.e. not for shopping customers). RIE acquired necessary RECs to meet this obligation through utilization of Renewable Energy programs that were implemented in RI for the past few years, such as REGrowth, Long-Term Contracting Standard, Distributed Generation, etc. and through competitive solicitations with those parties that have RECs and sell 158 them.

Currently our Renewable Energy programs create a surplus of certain RECs types that allow us to sell them to the market for additional profit; however, as the RES obligation increases each year towards a 100% end goal, this surplus will decrease each year until we are at a deficit and need to procure additional RECs through our RFP auction process/REC-only suppliers. Success is measured through the confirmation by the RI PUC RES Manager that the Company has supplied its required REC obligations.

RIE has met its REC obligations since PPL's acquisition of the company in 2022 and continues to meet its obligations going forward. [Add row]

# (5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

# Climate change

# (5.11.9.1) Type of stakeholder

Select from:

Customers

# (5.11.9.2) Type and details of engagement

#### **Education/Information sharing**

☑ Share information about your products and relevant certification schemes

# (5.11.9.3) % of stakeholder type engaged

Select from:

**100%** 

# (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

PPL's operating utilities in Kentucky, Pennsylvania and Rhode Island 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.

# (5.11.9.6) Effect of engagement and 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.

In 2023, Energy efficiency programs across PPL's utilities helped customers save more than 367,900 megawatt-hours of electricity and reduced peak demand by more than 76 megawatts across our business. Programs to support natural gas energy efficiency saved 318,600 MMBtu throughout 2023. 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.

# Climate change

# (5.11.9.1) Type of stakeholder

Select from:

Customers

# (5.11.9.2) Type and details of engagement

#### Innovation and collaboration

✓ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

# (5.11.9.3) % of stakeholder type engaged

Select from:

**☑** 100%

# (5.11.9.5) Rationale for engaging these stakeholders 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. Five of the eight 500-kilowatt sections of LG&E and KU's Solar Share Program are fully subscribed.

# (5.11.9.6) Effect of engagement and measures of success

LG&E and KU completed a fifth section of their Solar Share facility. The subscription-based Solar Share program is a cost-effective option available to residential, business and industrial customers who want to support solar energy for as little as 20 cents per day. More than 2,800 LG&E and KU customers across Kentucky have enrolled in the program that helps them reach their own renewable energy goals. Upon completion, the Solar Share facility will have eight sections and a total capacity of 4 megawatts. The Renewable Choice Calculator helps LG&E and KU customers explore their sustainability options. By inserting a few details — including

customer type and average monthly bill — the calculator uses the utilities' Solar Share Program and Green Energy Program to provide a solution that enables most customers to support renewables at a level that is equal to 100% of their power consumption for less than 1 per day or about 5% more on their monthly energy bill.

# Climate change

# (5.11.9.1) Type of stakeholder

Select from:

Customers

# (5.11.9.2) Type and details of engagement

#### **Education/Information sharing**

✓ Share information on environmental initiatives, progress and achievements

# (5.11.9.3) % of stakeholder type engaged

Select from:

**✓** 100%

# (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

This program is meant to inform all customers of PPL Electric of the company's advanced DERMS designed to manage solar, wind and other renewable power coming onto the grid. The system helps the company ensure good power quality and reliability and keeps the grid running smoothly. 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.

# (5.11.9.6) Effect of engagement and measures of success

The Distributed Energy Resource Management System helps PPL Electric better integrate more distributed energy resources like private solar, while preserving network reliability and power quality. To date, PPL Electric has connected more than 400 megawatts of renewable energy to the grid through the program. The user-friendly Renewable Energy Connection website makes it easier for PPL Electric customers to apply to connect solar panels and other generation systems to the grid.

# Climate change

# (5.11.9.1) Type of stakeholder

Select from:

Customers

# (5.11.9.2) Type and details of engagement

#### Innovation and collaboration

✓ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

# (5.11.9.3) % of stakeholder type engaged

Select from:

**1**00%

# (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

RIE contributed 2.5 million to support the Rhode Island Commerce Corporation's Renewable Energy Fund (REF), which provides grants for renewable energy projects that can produce electricity in a cleaner, more sustainable manner. These grants also help stimulate job growth in the green technology and energy sectors.

## (5.11.9.6) Effect of engagement and measures of success

The Rhode Island Commerce Corporation's Renewable Energy Fund provides grants for renewable energy projects that have the potential to produce electricity in a cleaner, more sustainable manner, while stimulating job growth in the green technology and energy sectors. Using funds from the "system benefit charge" on electric bills and alternative compliance payments received from retail electricity providers, CommerceRI funds renewable energy projects in small scale solar, commercial scale, and community renewables.

## Climate change

# (5.11.9.1) Type of stakeholder

Select from:

Customers

# (5.11.9.2) Type and details of engagement

#### **Education/Information sharing**

☑ Share information on environmental initiatives, progress and achievements

# (5.11.9.3) % of stakeholder type engaged

Select from:

**☑** 100%

# (5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

RIE offers two customer programs to encourage local renewable energy connections.

# (5.11.9.6) Effect of engagement and measures of success

About 620 megawatts of renewable energy nameplate capacity has been connected by year-end 2023. [Add row]

# **C6. Environmental Performance - Consolidation Approach**

# (6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

	Consolidation approach used	Provide the rationale for the choice of consolidation approach
Climate change	Select from:  ☑ Operational control	PPL environmental disclosures follow the same consolidation approach as our financial reporting.
Water	Select from: ☑ Operational control	PPL environmental disclosures follow the same consolidation approach as our financial reporting.
Biodiversity	Select from:  ✓ Operational control	PPL environmental disclosures follow the same consolidation approach as our financial reporting.

[Fixed row]

C7. Environmental	performance -	Climate	Change
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(7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structura
changes being accounted for in this disclosure of emissions data?

Has there been a structural change?	Has there been a structural change?
Select all that apply  ✓ No	Select all that apply ☑ No

[Fixed row]

# (7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

Change(s) in methodology, boundary, and/or reporting year definition?
Select all that apply  ☑ No

[Fixed row]

(7.3) Describe your organization's approach to reporting Scope 2 emissions.

# (7.3.1) Scope 2, location-based

Select from:

☑ We are not reporting a Scope 2, location-based figure

# (7.3.2) Scope 2, market-based

Select from:

☑ We are reporting a Scope 2, market-based figure

# (7.3.3) Comment

Emissions associated with all electric use in buildings across all operations (PPL Electric, RIE, and LG&E and KU building outside of our utility service territory) are calculated based on market-based factors.

[Fixed row]

(7.4.1) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

#### Row 1

## (7.4.1.1) Source of excluded emissions

Excluded categories are not core business activities and are relevant to all or most sectors. The most relevant categories to PPL are calculated to the best of our ability.

# (7.4.1.2) Scope(s) or Scope 3 category(ies)

Select all that apply

- ☑ Scope 3: Purchased goods and services
- ✓ Scope 3: Capital goods
- ☑ Scope 3: Upstream transportation and distribution
- ✓ Scope 3: Waste generated in operations

☑ Scope 3: End-of-life treatment of sold products

# (7.4.1.6) Relevance of Scope 3 emissions from this source

Select from:

☑ Emissions are not relevant

# (7.4.1.10) Explain why this source is excluded

Excluded categories are not core business activities and are below the define threshold of relevancy. The most relevant categories to PPL are calculated to the best of our ability.

[Add row]

(7.5) Provide your base year and base year emissions.

#### Scope 1

# (7.5.1) Base year end

12/31/2010

# (7.5.2) Base year emissions (metric tons CO2e)

60924814.0

## (7.5.3) Methodological details

Scope 1: 60,736,086 (Gross Generation Emissions) 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 1 (Gas Use in Facilities (stationary fuel combustion) LG&E and KU): 18,250. Base year and emissions are related to PPL's 2050 GHG goal.

# Scope 2 (market-based)

## (7.5.1) Base year end

# (7.5.2) Base year emissions (metric tons CO2e)

89732.0

# (7.5.3) Methodological details

Estimated market-based CO2e emissions. Scope 2 (Electricity Use in Facilities): 89,732 (notes: Beginning in 2019, LG&E and KU Electricity Use in Facilities for buildings in the utility's service territory in only captured in Scope 1 generation emissions; emissions were being double counted in Scope 2 (baseline not recalculated due to lack of threshold significance). Base year and emissions are related to PPL's 2050 GHG goal.

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

### (7.5.1) Base year end

12/31/2010

## (7.5.2) Base year emissions (metric tons CO2e)

1597157.0

# (7.5.3) Methodological details

Scope 3 (LG&E and KU Purchased Power for End Use Customers): 1,597,157. Base year and emissions are related to PPL's 2050 GHG goal. [Fixed row]

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

#### Reporting year

## (7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

25291849

# (7.6.3) Methodological details

Figure also includes Scope 1 emissions from gas operations, reported but not part of the company's net-zero GHG goal. Scope 1 (Gross): 25,085,753 Scope 1 (Fleet Vehicles) 28,240 Scope 1 (Small Plant Stationary) 2,384 Scope 1 (Plant Mobile Equipment) 5,373 Scope 1 (Gas Operations) 143,380 Scope 1 (SF6) 12,324 Scope 1 (Gas Use in Facilities (stationary fuel combustion)) 14,395

#### Past year 1

# (7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

27101051

# (7.6.2) End date

12/31/2022

# (7.6.3) Methodological details

Figure also includes Scope 1 emissions from gas operations, reported but not part of the company's net-zero GHG goal. Scope 1 (Gross): 26,882,439 Scope 1 (Fleet Vehicles) 31,052 Scope 1 (Small Plant Stationary) 2,915 Scope 1 (Plant Mobile Equipment) 4,944 Scope 1 (Gas Operations) 148,604 Scope 1 (SF6) 13,126 Scope 1 (Gas Use in Facilities (stationary fuel combustion)) 17,971 [Fixed row]

## (7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

#### Reporting year

# (7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

21258

# (7.7.4) Methodological details

Emissions associated with all electric use in buildings across all operations (PPL Electric, RIE, and LG&E and KU building outside of our utility service territory) are calculated based on market-based factors. LG&E-KU's market-based emissions captured in Scope 1 Gross MWh. LG&E and KU service centers located outside of its territory are counted as Scope 2: Electricity Use in Facilities.

## Past year 1

# (7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

26020

# (7.7.3) End date

12/31/2022

# (7.7.4) Methodological details

Emissions associated with all electric use in buildings across all operations (PPL Electric, RIE, and LG&E and KU building outside of our utility service territory) are calculated based on market-based factors. Gas Use in Facilities (stationary fuel combustion), previously reported as Scope 2, is now reported as Scope 1; emissions will remain part of PPL's 2050 goal.

[Fixed row]

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

# **Purchased goods and services**

## (7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

# (7.8.5) Please explain

Relevant for all/most sectors.

## **Capital goods**

# (7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

# (7.8.5) Please explain

Not core business activity; Relevant for all/most sectors.

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

# (7.8.1) Evaluation status

Select from:

✓ Relevant, calculated

# (7.8.2) Emissions in reporting year (metric tons CO2e)

5560783

# (7.8.3) Emissions calculation methodology

Select all that apply

Average data method

# (7.8.5) Please explain

CO2e from generation of electricity purchased for end use customers in PPL Electric, LG&E and KU, and RIE. This does not include gas purchased for end use customers, which will be classified under Use of sold product.

# **Upstream transportation and distribution**

# (7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

# (7.8.5) Please explain

Relevant for all/most sectors

# Waste generated in operations

# (7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

# (7.8.5) Please explain

Relevant for all/most sectors

#### **Business travel**

# (7.8.1) Evaluation status

Select from:

✓ Relevant, calculated

# (7.8.2) Emissions in reporting year (metric tons CO2e)

1051

# (7.8.3) Emissions calculation methodology

Select all that apply

✓ Distance-based method

# (7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

# (7.8.5) Please explain

CO2e emissions emitted from business travel for employees in PPL Electric, LG&E and KU, and RIE. Not core business activity; Relevant for all/most sectors

# **Employee commuting**

# (7.8.1) Evaluation status

Select from:

✓ Relevant, calculated

# (7.8.2) Emissions in reporting year (metric tons CO2e)

10870

# (7.8.3) Emissions calculation methodology

Select all that apply

✓ Distance-based method

# (7.8.5) Please explain

CO2e emissions emitted from employees commuting in PPL Electric, LG&E and KU, and RIE. Not core business activity; Relevant for all/most sectors

## **Upstream leased assets**

# (7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

# (7.8.5) Please explain

Relevant to all/most sectors.

# **Downstream transportation and distribution**

# (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

# (7.8.5) Please explain

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

## **Processing of sold products**

# (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

# (7.8.5) Please explain

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

## **Use of sold products**

# (7.8.1) Evaluation status

Select from:

✓ Relevant, calculated

# (7.8.2) Emissions in reporting year (metric tons CO2e)

3834945

# (7.8.3) Emissions calculation methodology

Select all that apply

✓ Average data method

# (7.8.5) Please explain

CO2e for gas purchased for end use customers.

# **End of life treatment of sold products**

# (7.8.1) Evaluation status

Select from:

☑ Relevant, not yet calculated

# (7.8.5) 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**

# (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

# (7.8.5) Please explain

PPL does not lease its assets to others.

#### **Franchises**

## (7.8.1) Evaluation status



✓ Not relevant, explanation provided

# (7.8.5) Please explain

PPL has no upstream or downstream franchises.

#### **Investments**

# (7.8.1) Evaluation status

Select from:

✓ Not relevant, explanation provided

# (7.8.5) Please explain

There are no upstream or downstream investments resulting in any additional CO2e emissions. [Fixed row]

# (7.8.1) Disclose or restate your Scope 3 emissions data for previous years.

### Past year 1

# (7.8.1.1) End date

12/31/2022

# (7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

6901883

# (7.8.1.7) Scope 3: Business travel (metric tons CO2e)

862

# (7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

11757

# (7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

4245142 [Fixed row]

# (7.9) Indicate the verification/assurance status that applies to your reported emissions.

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

[Fixed row]

(7.10.1) 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 output** 

# (7.10.1.1) Change in emissions (metric tons CO2e)

(7.10.1.2) Direction of change in emissions
---

Select from:

Decreased

# (7.10.1.3) Emissions value (percentage)

6.9

# (7.10.1.4) Please explain calculation

Owned net generation decreased by 6.9% from 2022 to 2023. [Fixed row]

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

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

[Fixed row]

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

Row 1

# (7.15.1.1) **Greenhouse** gas

Coloct II Cill.	Sel	ect	from:
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√ CO2

# (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

24899976

# (7.15.1.3) **GWP** Reference

Select from:

✓ IPCC Fourth Assessment Report (AR4 - 100 year)

#### Row 2

# (7.15.1.1) **Greenhouse** gas

Select from:

✓ CH4

# (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

143190

# (7.15.1.3) **GWP** Reference

Select from:

☑ IPCC Fourth Assessment Report (AR4 - 100 year)

### Row 3

# (7.15.1.1) Greenhouse gas

Select from:

**☑** N20

# (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

126361

# (7.15.1.3) **GWP** Reference

Select from:

✓ IPCC Fourth Assessment Report (AR4 - 100 year)

#### Row 4

# (7.15.1.1) Greenhouse gas

Select from:

✓ SF6

# (7.15.1.2) Scope 1 emissions (metric tons of CO2e)

11739

# (7.15.1.3) **GWP** Reference

Select from:

☑ IPCC Fourth Assessment Report (AR4 - 100 year) [Add row]

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

**Fugitives** 

# (7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

# (7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

5728

# (7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0.52

# (7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

155102

# (7.15.3.5) Comment

Scope 1 (Gas Operations) and Scope 1 (SF6) from Distribution Operations

# **Combustion (Electric utilities)**

# (7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

24899830

# (7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

2726

# (7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

24967980

# (7.15.3.5) Comment

Scope 1 Gross MWh and Small Plant Stationary.

# **Combustion (Other)**

# (7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

14395

# (7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

14395

# (7.15.3.5) Comment

Scope 1 (Gas Use in Facilities (stationary fuel combustion))

#### **Emissions not elsewhere classified**

# (7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

33613

# (7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

33613

# (7.15.3.5) Comment

Scope 1 (Plant Mobile Equipment) and Scope 1 (Fleet Vehicles) [Fixed row]

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

	Scope 1 emissions (metric tons CO2e)
United States of America	25291849

[Fixed row]

# (7.17.1) Break down your total gross global Scope 1 emissions by business division.

	Business division	Scope 1 emissions (metric ton CO2e)
Row 1	LG&E and KU	25139631
Row 3	RIE	135183
Row 4	PPL Electric	17035

[Add row]

# (7.19) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

# **Electric utility activities**

# (7.19.1) Gross Scope 1 emissions, metric tons CO2e

25093510

# (7.19.3) Comment

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.
[Fixed row]

# (7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response.

	Scope 1 emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)	Please explain
Consolidated accounting group	25291849	21258	PPL environmental disclosures follow the same consolidation approach as our financial reporting.

[Fixed row]

# (7.30) 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)	Select from: ✓ Yes
Consumption of purchased or acquired electricity	Select from:  ✓ Yes
Consumption of purchased or acquired heat	Select from: ☑ No
Consumption of purchased or acquired steam	Select from:

	Indicate whether your organization undertook this energy-related activity in the reporting year
	☑ No
Consumption of purchased or acquired cooling	Select from: ☑ No
Generation of electricity, heat, steam, or cooling	Select from:  ✓ Yes

[Fixed row]

(7.30.1) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

**Consumption of fuel (excluding feedstock)** 

# (7.30.1.1) Heating value

Select from:

☑ HHV (higher heating value)

# (7.30.1.3) MWh from non-renewable sources

218825

# (7.30.1.4) Total (renewable and non-renewable) MWh

218825

# Consumption of purchased or acquired electricity

# (7.30.1.1) Heating value

201	act	from:	
SEI	せしに	II OIII.	

✓ Unable to confirm heating value

# (7.30.1.2) MWh from renewable sources

10799

# (7.30.1.3) MWh from non-renewable sources

47541

# (7.30.1.4) Total (renewable and non-renewable) MWh

58340

# Consumption of self-generated non-fuel renewable energy

# (7.30.1.2) MWh from renewable sources

2859

# (7.30.1.4) Total (renewable and non-renewable) MWh

2859

# **Total energy consumption**

# (7.30.1.2) MWh from renewable sources

13658

# (7.30.1.3) MWh from non-renewable sources

266366

# (7.30.1.4) Total (renewable and non-renewable) MWh

# (7.30.6) 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	Select from:  ✓ Yes
Consumption of fuel for the generation of heat	Select from:  ✓ Yes
Consumption of fuel for the generation of steam	Select from: ✓ No
Consumption of fuel for the generation of cooling	Select from: ✓ No
Consumption of fuel for co-generation or tri-generation	Select from: ✓ No

[Fixed row]

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

	Heating value	Total fuel MWh consumed by the organization	Comment
Gas	Select from: ✓ HHV	78012	Calculated from gas use in facilities
Other non-renewable fuels (e.g. non-renewable hydrogen)	Select from: ✓ LHV	140813	Fleet consumption of diesel and petrol by PPL Electric, LG&E and KU, and RIE
Total fuel	Select from:	218825	Rich text input [must be under 2400 characters]

[Fixed row]

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

#### **United States of America**

(7.30.16.1) Consumption of purchased electricity (MWh)

58339

(7.30.16.2) Consumption of self-generated electricity (MWh)

2672364

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

0

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

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

# (7.33.1) Disclose the following information about your transmission and distribution business.

#### Row 1

# (7.33.1.1) Country/area/region

Select from:

✓ United States of America

# (7.33.1.2) Voltage level

Select from:

▼ Transmission (high voltage)

# (7.33.1.3) Annual load (GWh)

71687

# (7.33.1.4) Annual energy losses (% of annual load)

5

# (7.33.1.5) Scope where emissions from energy losses are accounted for

Select from:

✓ Scope 2 (market-based)

# (7.33.1.7) Length of network (km)

17850

# (7.33.1.8) Number of connections

1218

# (7.33.1.9) Area covered (km2)

49727.77

# (7.33.1.10) Comment

Defined as voltage exceeding 69 kV. Average line loss of 5% across the KY and PA system, average ISO-NE line loss is 8%; emissions associated with owned net generation and purchased power. Line loss emissions are not reported separately.

#### Row 3

# (7.33.1.1) Country/area/region

Select from:

✓ United States of America

# (7.33.1.2) Voltage level

Select from:

✓ Distribution (low voltage)

# (7.33.1.3) Annual load (GWh)

71687

# (7.33.1.4) Annual energy losses (% of annual load)

5

# (7.33.1.5) Scope where emissions from energy losses are accounted for

Select from:

✓ Scope 2 (market-based)

# (7.33.1.7) Length of network (km)

121642

# (7.33.1.8) Number of connections

3006113

# (7.33.1.9) Area covered (km2)

49727.77

# (7.33.1.10) Comment

Defined as voltage not exceeding 69 kV. Average line loss of 5% across the KY and PA system, average ISO-NE line loss is 8%; emissions associated with owned net generation and purchased power. Line loss emissions are not reported separately.

[Add row]

(7.45) 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.

Row 1

# (7.45.1) Intensity figure

0.003

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

25169727

## (7.45.3) Metric denominator

Ca	100+	from:	
OU	CUL	HOIII.	

✓ unit total revenue

# (7.45.4) Metric denominator: Unit total

8312000000

# (7.45.5) Scope 2 figure used

Select from:

✓ Market-based

# (7.45.6) % change from previous year

11

### (7.45.7) Direction of change

Select from:

Decreased

# (7.45.8) Reasons for change

Select all that apply

☑ Change in output

# (7.45.9) Please explain

Revenue intensity calculated based on PPL's goal-related emissions.

#### Row 2

# (7.45.1) Intensity figure

0.853

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

25085753

# (7.45.3) Metric denominator

Select from:

✓ megawatt hour generated (MWh)

### (7.45.4) Metric denominator: Unit total

29422636

#### (7.45.5) Scope 2 figure used

Select from:

✓ Market-based

### (7.45.6) % change from previous year

0.24

# (7.45.7) Direction of change

Select from:

Increased

### (7.45.8) Reasons for change

Select all that apply

☑ Change in output

### (7.45.9) Please explain

Only generation emissions are noted above and used to calculate generation carbon intensity. Carbon intensity calculated by gross owned generation divided by owned net generation (Scope 1 only).

[Add row]

(7.46) For your electric utility activities, provide a breakdown of your Scope 1 emissions and emissions intensity relating to your total power plant capacity and generation during the reporting year by source.

Coal - hard

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

22966259.17

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

✓ Net

(7.46.3) Scope 1 emissions intensity (Gross generation)

874.71

(7.46.4) Scope 1 emissions intensity (Net generation)

967.90

Gas

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

2119119.63

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:  ☑ Net
(7.46.3) Scope 1 emissions intensity (Gross generation)
385.08
(7.46.4) Scope 1 emissions intensity (Net generation)
395.21
Hydropower
(7.46.1) Absolute scope 1 emissions (metric tons CO2e)
0
(7.46.2) Emissions intensity based on gross or net electricity generation
Select from:  ✓ Net
(7.46.3) Scope 1 emissions intensity (Gross generation)
0.00
(7.46.4) Scope 1 emissions intensity (Net generation)
0.00
Solar
(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

(7.46.2) Emissions intensity based on gross or net electricity generation
Select from:
✓ Net
(7.46.3) Scope 1 emissions intensity (Gross generation)
0.00
(7.46.4) Scope 1 emissions intensity (Net generation)
0.00
Total
(7.46.1) Absolute scope 1 emissions (metric tons CO2e)
25085578.8
(7.46.2) Emissions intensity based on gross or net electricity generation
Select from:
✓ Net
(7.46.4) Scope 1 emissions intensity (Net generation)
852.53
[Fixed row]
(7.53.1) Provide details of your absolute emissions targets and progress made against those targets.
Row 1

184

(7.53.1.1) Target reference number



✓ Abs 1

### (7.53.1.2) Is this a science-based target?

Select from:

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

# (7.53.1.5) Date target was set

08/05/2021

# (7.53.1.6) Target coverage

Select from:

✓ Organization-wide

### (7.53.1.7) Greenhouse gases covered by target

Select all that apply

- ✓ Carbon dioxide (CO2)
- ✓ Methane (CH4)
- ✓ Nitrous oxide (N2O)

### (7.53.1.8) Scopes

Select all that apply

- ✓ Scope 1
- ✓ Scope 2
- ✓ Scope 3

# (7.53.1.9) Scope 2 accounting method

Select from:

✓ Market-based

#### (7.53.1.10) Scope 3 categories

Select all that apply

☑ Scope 3, Category 3 – Fuel- and energy- related activities (not included in Scope 1 or 2)

#### (7.53.1.11) End date of base year

12/31/2010

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

60924814

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

55325

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

1597157

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

1597157.000

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

62577296.000

### (7.53.1.33) Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

97.3

#### (7.53.1.34) Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

0.1

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

2.6

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

2.6

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

100

#### (7.53.1.54) End date of target

12/31/2035

#### (7.53.1.55) Targeted reduction from base year (%)

70

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

18773188.800

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

25148469

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

21258

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

592165

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

592165.000

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

25761892.000

(7.53.1.79) % of target achieved relative to base year

84.05

### (7.53.1.80) Target status in reporting year

Select from:

Underway

#### (7.53.1.82) Explain target coverage and identify any exclusions

PPL's target includes Scope 1 (Gross MWh of Owned Generation, Fleet Vehicles, Small Plant Stationary Fuel Combustion Sources not included in Stack Emissions, Plant Mobile Equipment, Fugitive SF6, and Gas Use in Facilities (stationary fuel combustion); Scope 2 (Electricity Use in Facilities); and Scope 3 (LG&E and KU) Electricity Purchased for End Use Customers. PPL's original 2050 goal was publicly announced in January 2018 and revised in 2020.

In August 2021, PPL set a new goal to achieve net-zero carbon emissions by 2050 and established new interim targets – 70% reduction by 2035 and 80% reduction by 2040 from a 2010 baseline. 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 PPL operations are calculated based on market-based factors.

#### (7.53.1.83) Target objective

Our broad-based clean energy transition strategy ensures we can achieve our emissions reduction targets and deliver an affordable, reliable and resilient clean energy future for our customers and communities.

#### (7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

To help achieve these reductions and support our net-zero by 2050 goal, PPL has a four-part clean energy strategy aimed at decarbonizing our owned generation and operations, bringing smart grid technology and renewable energy solutions to our customers, and investing in research and development necessary to support the deployment of affordable and reliable clean energy technologies.

In Kentucky, LG&E and KU have received regulatory approval to retire 600 megawatts of aging coal-fired generation and more than 50 megawatts of peaking units; construct a new 640 megawatt combined cycle natural gas plant; and add more than 1,000 megawatts of solar generation and energy storage. Once concluded, these actions will reduce the company's carbon intensity by more than 20%. To advance the cleaner energy transition, we are working on modernizing our electric grids and gas LDC networks enterprise-wide.

#### Row 2

#### (7.53.1.1) Target reference number

Select from:

✓ Abs 2

#### (7.53.1.2) Is this a science-based target?

Select from:

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

#### (7.53.1.5) Date target was set

08/05/2021

#### (7.53.1.6) Target coverage



✓ Organization-wide

### (7.53.1.7) Greenhouse gases covered by target

Select all that apply

- ✓ Carbon dioxide (CO2)
- ✓ Methane (CH4)
- ✓ Nitrous oxide (N2O)

#### (7.53.1.8) Scopes

Select all that apply

- ✓ Scope 1
- ✓ Scope 2
- ✓ Scope 3

#### (7.53.1.9) Scope 2 accounting method

Select from:

✓ Market-based

#### (7.53.1.10) Scope 3 categories

Select all that apply

☑ Scope 3, Category 3 – Fuel- and energy- related activities (not included in Scope 1 or 2)

# (7.53.1.11) End date of base year

12/31/2010

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

60924814.0

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

55325.0

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

1597157

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

1597157.000

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

62577296.000

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

97.3

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

0.1

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

2.6

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

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

100

(7.53.1.54) End date of target

12/31/2040

(7.53.1.55) Targeted reduction from base year (%)

80

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

12515459.200

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

25148469

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

21258

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

592165

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

592165.000

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

#### (7.53.1.79) % of target achieved relative to base year

73.54

#### (7.53.1.80) Target status in reporting year

Select from:

Underway

#### (7.53.1.82) Explain target coverage and identify any exclusions

PPL's target includes Scope 1 (Gross MWh of Owned Generation, Fleet Vehicles, Small Plant Stationary Fuel Combustion Sources not included in Stack Emissions, Plant Mobile Equipment, Fugitive SF6, and Gas Use in Facilities (stationary fuel combustion); Scope 2 (Electricity Use in Facilities); and Scope 3 (LG&E and KU) Electricity Purchased for End Use Customers. PPL's original 2050 goal was publicly announced in January 2018 and revised in 2020.

In August 2021, PPL set a new goal to achieve net-zero carbon emissions by 2050 and established new interim targets – 70% reduction by 2035 and 80% reduction by 2040 from a 2010 baseline. 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 PPL operations are calculated based on market-based factors.

#### (7.53.1.83) Target objective

Our broad-based clean energy transition strategy ensures we can achieve our emissions reduction targets and deliver an affordable, reliable and resilient clean energy future for our customers and communities.

#### (7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

To help achieve these reductions and support our net-zero by 2050 goal, PPL has a four-part clean energy strategy aimed at decarbonizing our owned generation and operations, bringing smart grid technology and renewable energy solutions to our customers, and investing in research and development necessary to support the deployment of affordable and reliable clean energy technologies.

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these actions will reduce the company's carbon intensity by more than 20%. To advance the cleaner energy transition, we are working on modernizing our electric grids and gas LDC networks enterprise-wide.

#### Row 3

#### (7.53.1.1) Target reference number

Select from:

✓ Abs 3

# (7.53.1.2) Is this a science-based target?

Select from:

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

### (7.53.1.5) Date target was set

08/05/2021

# (7.53.1.6) Target coverage

Select from:

✓ Organization-wide

### (7.53.1.7) Greenhouse gases covered by target

Select all that apply

- ✓ Carbon dioxide (CO2)
- ✓ Methane (CH4)
- ✓ Nitrous oxide (N2O)

#### (7.53.1.8) Scopes

Select all that apply

✓ Scope 1

- ✓ Scope 2
- ✓ Scope 3

#### (7.53.1.9) Scope 2 accounting method

Select from:

✓ Market-based

#### (7.53.1.10) Scope 3 categories

Select all that apply

☑ Scope 3, Category 3 – Fuel- and energy- related activities (not included in Scope 1 or 2)

# (7.53.1.11) End date of base year

12/31/2010

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

60924814.0

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

55325.0

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

1597157

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

1597157.000

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

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

97.3

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

0.1

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

2.6

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

2.6

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

100

(7.53.1.54) End date of target

12/31/2050

(7.53.1.55) Targeted reduction from base year (%)

100

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

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

25148469

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

21258

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

592165

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

592165.000

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

25761892.000

(7.53.1.79) % of target achieved relative to base year

58.83

(7.53.1.80) Target status in reporting year

Select from:

Underway

(7.53.1.82) Explain target coverage and identify any exclusions

PPL's target includes Scope 1 (Gross MWh of Owned Generation, Fleet Vehicles, Small Plant Stationary Fuel Combustion Sources not included in Stack Emissions, Plant Mobile Equipment, Fugitive SF6, and Gas Use in Facilities (stationary fuel combustion); Scope 2 (Electricity Use in Facilities); and Scope 3 (LG&E and KU) Electricity Purchased for End Use Customers. PPL's original 2050 goal was publicly announced in January 2018 and revised in 2020.

In August 2021, PPL set a new goal to achieve net-zero carbon emissions by 2050 and established new interim targets – 70% reduction by 2035 and 80% reduction by 2040 from a 2010 baseline. 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 PPL operations are calculated based on market-based factors.

#### (7.53.1.83) Target objective

Our broad-based clean energy transition strategy ensures we can achieve our emissions reduction targets and deliver an affordable, reliable and resilient clean energy future for our customers and communities.

#### (7.53.1.84) Plan for achieving target, and progress made to the end of the reporting year

To help achieve these reductions and support our net-zero by 2050 goal, PPL has a four-part clean energy strategy aimed at decarbonizing our owned generation and operations, bringing smart grid technology and renewable energy solutions to our customers, and investing in research and development necessary to support the deployment of affordable and reliable clean energy technologies.

In Kentucky, LG&E and KU have received regulatory approval to retire 600 megawatts of aging coal-fired generation and more than 50 megawatts of peaking units; construct a new 640 megawatt combined cycle natural gas plant; and add more than 1,000 megawatts of solar generation and energy storage. Once concluded, these actions will reduce the company's carbon intensity by more than 20%. To advance the cleaner energy transition, we are working on modernizing our electric grids and gas LDC networks enterprise-wide.

[Add row]

#### (7.54) Did you have any other climate-related targets that were active in the reporting year?

Select all that apply

- ☑ Targets to increase or maintain low-carbon energy consumption or production
- ✓ Net-zero targets
- ✓ Other climate-related targets

#### (7.54.1) Provide details of your targets to increase or maintain low-carbon energy consumption or production.

#### Row 1

# (7.54.1.1) Target reference number

Select from:

✓ Low 1

### (7.54.1.2) Date target was set

12/31/2004

# (7.54.1.3) Target coverage

Select from:

✓ Business division

### (7.54.1.4) Target type: energy carrier

Select from:

✓ Electricity

# (7.54.1.5) Target type: activity

Select from:

Consumption

# (7.54.1.6) Target type: energy source

Select from:

☑ Renewable energy source(s) only

# (7.54.1.7) End date of base year

12/31/2007

#### (7.54.1.9) % share of low-carbon or renewable energy in base year

3

#### (7.54.1.10) End date of target

12/31/2023

#### (7.54.1.11) % share of low-carbon or renewable energy at end date of target

23

#### (7.54.1.12) % share of low-carbon or renewable energy in reporting year

23

#### (7.54.1.13) % of target achieved relative to base year

100.00

#### (7.54.1.14) Target status in reporting year

Select from:

Achieved

#### (7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

☑ Other, please specify :RI Renewable Energy Standard

# (7.54.1.19) Explain target coverage and identify any exclusions

RIE: Rhode Island's Renewable Energy Standard that requires all obligated entities to obtain a certain percentage of the electricity they sell at retail to Rhode Island end-use customers, adjusted for electric line losses, from eligible renewable energy resources, escalating annually until reaching 100% in 2033. All compliance reports can be found here: https://rhodeislandres.com/ripuc-annual-reports/ In 2023, RIE was required to meet a 23% RPS.

#### (7.54.1.20) Target objective

RIE supports the state of Rhode Island's Renewable Energy Standard (RES), which requires purchase of 100% renewable electricity by 2033.

#### (7.54.1.22) List the actions which contributed most to achieving this target

RIE is supporting offshore wind development for RIE customers. Further, RIE conducts annual open enrollment for small and medium scale renewable energy through the RI Renewable Energy Growth Program. In 2023, RIE issued a request for proposals for long-term contract capacity for 1,200 megawatts of offshore wind energy.

#### Row 3

#### (7.54.1.1) Target reference number

Select from:

✓ Low 2

#### (7.54.1.2) Date target was set

12/31/2004

#### (7.54.1.3) Target coverage

Select from:

☑ Business division

### (7.54.1.4) Target type: energy carrier

Select from:

**☑** Electricity

# (7.54.1.5) Target type: activity

Select from:

Consumption

# (7.54.1.6) Target type: energy source Select from: ☑ Renewable energy source(s) only (7.54.1.7) End date of base year 12/31/2007 (7.54.1.9) % share of low-carbon or renewable energy in base year 3 (7.54.1.10) End date of target 12/31/2033 (7.54.1.11) % share of low-carbon or renewable energy at end date of target 100 (7.54.1.12) % share of low-carbon or renewable energy in reporting year 23 (7.54.1.13) % of target achieved relative to base year 20.62 (7.54.1.14) Target status in reporting year

Select from:

Underway

### (7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

☑ Other, please specify: Rhode Island Renewable Energy Standard

#### (7.54.1.19) Explain target coverage and identify any exclusions

RIE: Rhode Island's Renewable Energy Standard that requires all obligated entities to obtain a certain percentage of the electricity they sell at retail to Rhode Island end-use customers, adjusted for electric line losses, from eligible renewable energy resources, escalating annually until reaching 100% in 2033. All compliance reports can be found on the Rhode Island Renewable Energy Standard website (https://rhodeislandres.com/ripuc-annual-reports/).In 2022, RIE was required to meet a 19% Renewable Portfolio Standard (RPS).

#### (7.54.1.20) Target objective

RIE supports the state of Rhode Island's Renewable Energy Standard (RES), which requires purchase of 100% renewable electricity by 2033.

#### (7.54.1.21) Plan for achieving target, and progress made to the end of the reporting year

RIE is supporting offshore wind development for RIE customers. Further, RIE conducts annual open enrollment for small and medium scale renewable energy through the RI Renewable Energy Growth Program. In 2023, RIE issued a request for proposals for long-term contract capacity for 1,200 megawatts of offshore wind energy.

#### Row 4

#### (7.54.1.1) Target reference number

Select from:

✓ Low 3

#### (7.54.1.2) Date target was set

12/31/2007

#### (7.54.1.3) Target coverage

Select from:

✓ Business division

#### (7.54.1.4) Target type: energy carrier

Select from:

**☑** Electricity

#### (7.54.1.5) Target type: activity

Select from:

Consumption

#### (7.54.1.6) Target type: energy source

Select from:

☑ Renewable energy source(s) only

#### (7.54.1.7) End date of base year

12/31/2007

### (7.54.1.9) % share of low-carbon or renewable energy in base year

5.7

# (7.54.1.10) End date of target

12/31/2021

# (7.54.1.11) % share of low-carbon or renewable energy at end date of target

18

# (7.54.1.12) % share of low-carbon or renewable energy in reporting year

18

#### (7.54.1.13) % of target achieved relative to base year

100.00

#### (7.54.1.14) Target status in reporting year

Select from:

Achieved

#### (7.54.1.17) Is this target part of an overarching initiative?

Select all that apply

✓ Other, please specify :PA Act 129

#### (7.54.1.19) Explain target coverage and identify any exclusions

PPL Electric: PPL Electric's PA Alternative Energy Portfolio Standard (PA AEPS) for CY2023 is 18%.

#### (7.54.1.20) Target objective

PPL Electric's PA Alternative Energy Portfolio Standard (PA AEPS) for CY2023 is 18%.

#### (7.54.1.22) List the actions which contributed most to achieving this target

The final target under the PA AEPS Act was achieved in CY2020 – one year ahead of its target. The 2023 target was fully achieved through competitive solicitation for PA-eligible RECs and approved by the PA Public Utility Commission.

[Add row]

#### (7.54.2) Provide details of any other climate-related targets, including methane reduction targets.

#### Row 1

#### (7.54.2.1) Target reference number

Select from:

✓ Oth 1

#### (7.54.2.2) Date target was set

04/22/2016

#### (7.54.2.3) Target coverage

Select from:

✓ Business division

### (7.54.2.4) Target type: absolute or intensity

Select from:

Absolute

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

#### **Energy consumption or efficiency**

✓ MWh

### (7.54.2.7) End date of base year

12/31/2021

# (7.54.2.8) Figure or percentage in base year

187891

#### (7.54.2.9) End date of target

12/31/2026

# (7.54.2.10) Figure or percentage at end of date of target

#### (7.54.2.11) Figure or percentage in reporting year

203117

#### (7.54.2.12) % of target achieved relative to base year

1.4333509686

#### (7.54.2.13) Target status in reporting year

Select from:

Underway

#### (7.54.2.15) Is this target part of an emissions target?

No

#### (7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

✓ Other, please specify :Part of PPL's enterprise carbon reduction goal

#### (7.54.2.18) Please explain target coverage and identify any exclusions

PPL Electric: The target under PPL Electric's Phase IV plan is to implement energy efficiency and demand response targeting customers in the residential, low-income and non-residential sectors, that would achieve additional annual savings of 1,250,157 MWh.

#### (7.54.2.19) Target objective

Part of PPL's enterprise carbon reduction goal.

#### (7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

PPL Electric plans to achieve its targets using a portfolio of comprehensive programs, targeting customers in the residential, low-income, and non-residential sectors with a 5-year budget of 307M. Figure in base year and reporting year are annual figures. Through 2023, PPL Electric has seen a cumulative savings of 681,299.

#### Row 2

#### (7.54.2.1) Target reference number

Select from:

✓ Oth 2

#### (7.54.2.2) Date target was set

04/07/2021

#### (7.54.2.3) Target coverage

Select from:

☑ Business division

#### (7.54.2.4) Target type: absolute or intensity

Select from:

✓ Absolute

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

#### Low-carbon vehicles

☑ Other low-carbon vehicles, please specify :Carbon emissions reduction by utilizing electric vehicles (MT of CO2e)

#### (7.54.2.7) End date of base year

12/31/2019

#### (7.54.2.8) Figure or percentage in base year

#### (7.54.2.9) End date of target

12/31/2030

### (7.54.2.10) Figure or percentage at end of date of target

1600

# (7.54.2.11) Figure or percentage in reporting year

10757

### (7.54.2.12) % of target achieved relative to base year

3.4479122733

### (7.54.2.13) Target status in reporting year

Select from:

Underway

#### (7.54.2.15) Is this target part of an emissions target?

Yes, part of PPL's goal to achieve net-zero emissions by 2050.

#### (7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ Other, please specify:Part of PPL's enterprise carbon reduction goal

#### (7.54.2.18) Please explain target coverage and identify any exclusions

PPL Electric: PPL Electric set vehicle electrification a goal to electrify 50% of medium/heavy duty vehicles by 2030; 100% of light-duty vehicles and indoor forklifts by 2030; and converting 80% of heavy-duty vehicles with electric lift technology (ePTO) by 2025. Target year emissions are an estimate and dependent upon vehicle availability.

#### (7.54.2.19) Target objective

Part of PPL's enterprise carbon reduction goal.

#### (7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

PPL's plans include converting light-duty vehicles from carbon-based fuels using a combination of fully electric vehicles or plug-in hybrids. For heavy-duty vehicles, electric lift technology uses battery power to operate the boom, bucket and lifts used by lineworkers, reducing the need for engine idling. This reduces fuel consumption and maintenance costs and minimizes job site noise. Fuel consumption is reduced by as much as a gallon of diesel fuel per hour of eliminated idling.

#### Row 3

# (7.54.2.1) Target reference number

Select from:

**✓** Oth 3

#### (7.54.2.2) Date target was set

04/07/2021

#### (7.54.2.3) Target coverage

Select from:

✓ Business division

#### (7.54.2.4) Target type: absolute or intensity

Select from:

Absolute

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

#### Low-carbon vehicles

✓ Other low-carbon vehicles, please specify: Carbon emissions reduction by utilizing electric vehicles (MT of CO2e)

#### (7.54.2.7) End date of base year

12/31/2019

### (7.54.2.8) Figure or percentage in base year

14654

#### (7.54.2.9) End date of target

12/31/2030

# (7.54.2.10) Figure or percentage at end of date of target

2800

### (7.54.2.11) Figure or percentage in reporting year

13426

#### (7.54.2.12) % of target achieved relative to base year

10.3593723638

# (7.54.2.13) Target status in reporting year

Select from:

Underway

### (7.54.2.15) Is this target part of an emissions target?

Yes, part of PPL's goal to achieve net-zero emissions by 2050.

#### (7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

✓ Other, please specify :Part of PPL's enterprise carbon reduction goal

#### (7.54.2.18) Please explain target coverage and identify any exclusions

LG&E and KU: LG&E and KU set a goal to electrify 50% of medium/heavy duty vehicles by 2030; 100% of light-duty vehicles and indoor forklifts by 2030; and converting 80% of heavy-duty vehicles with electric lift technology (ePTO) by 2030. Target year emissions are an estimate and dependent upon vehicle availability.

#### (7.54.2.19) Target objective

Part of PPL's enterprise carbon reduction goal.

#### (7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

PPL's plans include converting light-duty vehicles from carbon-based fuels using a combination of fully electric vehicles or plug-in hybrids. For heavy-duty vehicles, electric lift technology uses battery power to operate the boom, bucket and lifts used by lineworkers, reducing the need for engine idling. This reduces fuel consumption and maintenance costs and minimizes job site noise. Fuel consumption is reduced by as much as a gallon of diesel fuel per hour of eliminated idling.

#### Row 4

#### (7.54.2.1) Target reference number

Select from:

✓ Oth 4

#### (7.54.2.2) Date target was set

04/20/2023

#### (7.54.2.3) Target coverage

Select from:

✓ Business division

#### (7.54.2.4) Target type: absolute or intensity

Select from:

Absolute

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

#### Low-carbon vehicles

✓ Other low-carbon vehicles, please specify: Carbon emissions reduction by utilizing electric vehicles (MT of CO2e)

#### (7.54.2.7) End date of base year

12/31/2022

### (7.54.2.8) Figure or percentage in base year

6056

### (7.54.2.9) End date of target

12/31/2030

#### (7.54.2.11) Figure or percentage in reporting year

4057

# (7.54.2.13) Target status in reporting year

Select from:

Underway

# (7.54.2.15) Is this target part of an emissions target?

Yes, part of PPL's goal to achieve net-zero emissions by 2050.

#### (7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

✓ Other, please specify :Part of PPL's enterprise carbon reduction goal

#### (7.54.2.18) Please explain target coverage and identify any exclusions

RIE: RIE set a goal to electrify 50% of medium/heavy duty vehicles by 2030; 100% of light-duty vehicles and indoor forklifts by 2030; and converting 80% of heavy-duty vehicles with electric lift technology (ePTO) by 2030. Target year emission estimates continue to be calculated and will be dependent upon vehicle availability.

#### (7.54.2.19) Target objective

Part of PPL's enterprise carbon reduction goal.

#### (7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

PPL's plans include converting light-duty vehicles from carbon-based fuels using a combination of fully electric vehicles or plug-in hybrids. For heavy-duty vehicles, electric lift technology uses battery power to operate the boom, bucket and lifts used by lineworkers, reducing the need for engine idling. This reduces fuel consumption and maintenance costs and minimizes job site noise. Fuel consumption is reduced by as much as a gallon of diesel fuel per hour of eliminated idling.

#### Row 5

#### (7.54.2.1) Target reference number

Select from:

**☑** Oth 5

#### (7.54.2.2) Date target was set

04/07/2021

#### (7.54.2.3) Target coverage

Select from:

✓ Business division

# (7.54.2.4) Target type: absolute or intensity

Select from:

Absolute

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

#### Low-carbon buildings

✓ Other low-carbon buildings, please specify: Carbon emissions reduction through reduced energy use (MT CO2e)

#### (7.54.2.7) End date of base year

12/31/2019

### (7.54.2.8) Figure or percentage in base year

24192

# (7.54.2.9) End date of target

12/31/2030

#### (7.54.2.10) Figure or percentage at end of date of target

15000

#### (7.54.2.11) Figure or percentage in reporting year

17143

# (7.54.2.12) % of target achieved relative to base year

76.6862489121

# (7.54.2.13) Target status in reporting year

Select from:

Underway

## (7.54.2.15) Is this target part of an emissions target?

Yes, part of PPL's goal to achieve net-zero emissions by 2050.

## (7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ Other, please specify :Part of PPL's enterprise carbon reduction goal

### (7.54.2.18) Please explain target coverage and identify any exclusions

PPL Electric: PPL Electric set a goal to decrease electricity use in buildings 28% by 2030 from a 2019 baseline. PPL Electric will undertake facilities planning to reduce emissions associated with our electric and gas use, including increasing renewables consumption for our owned buildings. We have already begun to identify opportunities to serve our energy needs through clean energy options.

## (7.54.2.19) Target objective

Part of PPL's enterprise carbon reduction goal.

## (7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

In Pennsylvania, we completed our second solar project at a PPL Electric facility to help meet our energy needs. We expect to install systems at additional service centers in the future.

#### Row 6

## (7.54.2.1) Target reference number

Select from:

✓ Oth 6

#### (7.54.2.2) Date target was set

#### (7.54.2.3) Target coverage

Select from:

✓ Business division

## (7.54.2.4) Target type: absolute or intensity

Select from:

Absolute

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

#### Low-carbon buildings

☑ Other low-carbon buildings, please specify: Carbon emissions reduction through reduced energy use (MT CO2e)

## (7.54.2.7) End date of base year

12/31/2019

## (7.54.2.8) Figure or percentage in base year

36903

# (7.54.2.9) End date of target

12/31/2030

## (7.54.2.10) Figure or percentage at end of date of target

26000

#### (7.54.2.11) Figure or percentage in reporting year

#### (7.54.2.12) % of target achieved relative to base year

52.0407227369

## (7.54.2.13) Target status in reporting year

Select from:

Underway

# (7.54.2.15) Is this target part of an emissions target?

Yes, part of PPL's goal to achieve net-zero emissions by 2050.

## (7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ Other, please specify :Part of PPL's enterprise carbon reduction goal

#### (7.54.2.18) Please explain target coverage and identify any exclusions

LG&E and KU: LG&E and KU set a goal to decrease electricity use in buildings 28% by 2030 from a 2019 baseline. LG&E and KU will undertake facilities planning to reduce emissions associated with our electric and gas use, including increasing renewables consumption for our owned buildings. We have already begun to identify opportunities to serve our energy needs through clean energy options.

#### (7.54.2.19) Target objective

Part of PPL's enterprise carbon reduction goal.

### (7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

In Kentucky, a fully regulated state, reductions in building electricity use will help to reduce scope 1 emissions from our owned generation.

#### Row 7

#### (7.54.2.1) Target reference number

Select from:

✓ Oth 7

#### (7.54.2.2) Date target was set

04/20/2023

#### (7.54.2.3) Target coverage

Select from:

✓ Business division

#### (7.54.2.4) Target type: absolute or intensity

Select from:

Absolute

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

#### Low-carbon buildings

✓ Other low-carbon buildings, please specify: Carbon emissions reduction through reduced energy use (MT CO2e)

# (7.54.2.7) End date of base year

12/31/2022

## (7.54.2.8) Figure or percentage in base year

4860

# (7.54.2.9) End date of target

## (7.54.2.11) Figure or percentage in reporting year

3056

#### (7.54.2.13) Target status in reporting year

Select from:

Underway

## (7.54.2.15) Is this target part of an emissions target?

Yes, part of PPL's goal to achieve net-zero emissions by 2050.

## (7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ Other, please specify :Part of PPL's enterprise carbon reduction goal

# (7.54.2.18) Please explain target coverage and identify any exclusions

RIE: Following its acquisition by PPL in 2022, RIE established a goal to reduce electricity use in buildings 28% by 2030 from a 2022 baseline.

## (7.54.2.19) Target objective

Part of PPL's enterprise carbon reduction goal.

#### (7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

In Rhode Island, RIE will undertake facilities planning to reduce emissions associated with our electric and gas use, including increasing renewables consumption for our owned buildings. We have already begun to identify opportunities to serve our energy needs through clean energy options.

#### Row 8

# (7.54.2.1) Target reference number

Select from:  ☑ Oth 8
(7.54.2.2) Date target was set
04/07/2021
(7.54.2.3) Target coverage
Select from:  ✓ Business division
(7.54.2.4) Target type: absolute or intensity
Select from:  ☑ Absolute
(7.54.2.5) Target type: category & Metric (target numerator if reporting an intensity target)
Low-carbon buildings  ☑ Other low-carbon buildings, please specify :Carbon emissions reduction through reduced gas use (MT CO2e)
(7.54.2.7) End date of base year
12/31/2019
(7.54.2.8) Figure or percentage in base year

8349

# (7.54.2.9) End date of target

12/31/2030

# (7.54.2.10) Figure or percentage at end of date of target

## (7.54.2.11) Figure or percentage in reporting year

6318

## (7.54.2.12) % of target achieved relative to base year

86.7948717949

## (7.54.2.13) Target status in reporting year

Select from:

Underway

## (7.54.2.15) Is this target part of an emissions target?

Yes, part of PPL's goal to achieve net-zero emissions by 2050.

#### (7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

✓ Other, please specify :Part of PPL's enterprise carbon reduction goal

## (7.54.2.18) Please explain target coverage and identify any exclusions

LG&E and KU: LG&E and KU set a goal to decrease gas use in buildings 28% by 2030 from a 2019 baseline. 2019 baseline and figure in target year have been recalculated in 2022 as usage was being double counted.

#### (7.54.2.19) Target objective

Part of PPL's enterprise carbon reduction goal.

#### Row 9

#### (7.54.2.1) Target reference number

Select from:
✓ Oth 9
(7.54.2.2) Date target was set
04/20/2023
(7.54.2.3) Target coverage
Select from:
✓ Business division
(7.54.2.4) Torrect type: absolute ar intensity
(7.54.2.4) Target type: absolute or intensity
Select from:
✓ Absolute
(7.54.2.5) Target type: category & Metric (target numerator if reporting an intensity target)
Low-carbon buildings
✓ Other low-carbon buildings, please specify: Carbon emissions reduction through reduced gas use (MT CO2e)
(7.54.2.7) End date of hase year

12/31/2022

# (7.54.2.8) Figure or percentage in base year

10913

# (7.54.2.9) End date of target

12/31/2030

# (7.54.2.11) Figure or percentage in reporting year

## (7.54.2.13) Target status in reporting year

Select from:

Underway

# (7.54.2.15) Is this target part of an emissions target?

Yes, part of PPL's goal to achieve net-zero emissions by 2050.

## (7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ Other, please specify:Part of PPL's enterprise carbon reduction goal

### (7.54.2.18) Please explain target coverage and identify any exclusions

RIE: Following its acquisition by PPL in 2022, RIE established a goal to decrease gas use in buildings 28% by 2030 from a 2022 baseline.

#### (7.54.2.19) Target objective

Part of PPL's enterprise carbon reduction goal.

#### **Row 10**

#### (7.54.2.1) Target reference number

Select from:

✓ Oth 10

## (7.54.2.2) Date target was set

04/07/2021

#### (7.54.2.3) Target coverage

Select from:

✓ Organization-wide

#### (7.54.2.4) Target type: absolute or intensity

Select from:

✓ Absolute

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

#### Low-carbon buildings

☑ Other low-carbon buildings, please specify: Reduction of building energy use through installation of solar arrays to offset energy use

#### (7.54.2.7) End date of base year

12/31/2021

#### (7.54.2.13) Target status in reporting year

Select from:

Underway

# (7.54.2.15) Is this target part of an emissions target?

Yes, part of PPL's goal to achieve net-zero emissions by 2050.

## (7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ Other, please specify:Part of PPL's enterprise carbon reduction goal

# (7.54.2.18) Please explain target coverage and identify any exclusions

Reduction of building energy use goals include the installation of solar arrays to offset energy use.

# (7.54.2.19) Target objective

Part of PPL's enterprise carbon reduction goal. [Add row]

#### (7.54.3) Provide details of your net-zero target(s).

#### Row 1

# (7.54.3.1) Target reference number

Select from:

✓ NZ1

#### (7.54.3.2) Date target was set

08/05/2021

# (7.54.3.3) Target Coverage

Select from:

✓ Organization-wide

# (7.54.3.4) Targets linked to this net zero target

Select all that apply

- ✓ Abs1
- ✓ Abs2
- ✓ Abs3

# (7.54.3.5) End date of target for achieving net zero

#### (7.54.3.6) Is this a science-based target?

Select from:

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

## (7.54.3.8) Scopes

Select all that apply

- ✓ Scope 1
- ✓ Scope 2
- ✓ Scope 3

# (7.54.3.9) Greenhouse gases covered by target

Select all that apply

- ✓ Carbon dioxide (CO2)
- ✓ Methane (CH4)
- ✓ Nitrous oxide (N2O)

#### (7.54.3.10) Explain target coverage and identify any exclusions

PPL has set a goal to achieve net-zero carbon emissions by 2050. PPL's target includes Scope 1 (Gross MWh of Owned Generation, Fleet Vehicles, Small Plant Stationary Fuel Combustion Sources not included in Stack Emissions, Plant Mobile Equipment, Fugitive SF6, and Gas Use in Facilities (stationary fuel combustion)), Scope 2 (Electricity Use in Facilities), and Scope 3 (Electricity Purchased for End Use Customers). In addition, we are targeting a 70% reduction from 2010 levels by 2035 and an 80% reduction by 2040. This goal covers at least 95% of our Scopes 1 and 2 emissions and also includes Scope 3 emissions associated with our purchased electricity for LG&E and KU customers. Scope 1 emissions from gas operation are not included in the target.

#### (7.54.3.11) Target objective

PPL has set a goal to achieve net-zero carbon emissions by 2050.

(7.54.3.12) Do you intend to neutralize any residual emissions with permanent carbon removals at the end of the target?

Select from:

✓ Yes

#### (7.54.3.13) Do you plan to mitigate emissions beyond your value chain?

Select from:

✓ No, and we do not plan to within the next two years

#### (7.54.3.15) Planned milestones and/or near-term investments for neutralization at the end of the target

We view our path to net-zero emissions on a continuum, with a primary focus on eliminating our gross emissions, leveraging technology to remove emissions where they cannot be eliminated due to cost or reliability constraints, and finally, considering carbon offsets for any remaining emissions as the least preferred option. We continue to assess the dynamic energy landscape to identify opportunities to economically support this transition.

In Kentucky, LG&E and KU have received regulatory approval to retire 600 megawatts of aging coal-fired generation and more than 50 megawatts of peaking units; construct a new 640 megawatt combined-cycle natural gas plant; and add more than 1,000 megawatts of solar generation and energy storage. Once concluded, these actions will reduce the company's carbon intensity by more than 20%. To advance the cleaner energy transition, we are working on modernizing our electric grids and gas LDC networks enterprise-wide.

In addition to decarbonizing our generation portfolio, PPL's carbon emissions goal and clean energy transition strategy include decarbonizing other areas of our business by reducing company energy use, increasing electrification of fleet vehicles and reducing emissions associated with transmission and distribution equipment. We have set 2030 targets for fleet electrification and reductions in building energy use. We have made improvements to our gas distribution system in Kentucky resulting in reduced leaks and greenhouse gas emissions; we are exploring other options to reduce the methane intensity of the system, as well as alternative heating options for customers. In Rhode Island, we are taking part in the Rhode Island Public Utility Commission's ("PUC") regulatory proceeding to investigate the future of gas use and infrastructure in the state.

#### (7.54.3.17) Target status in reporting year

Select from:

Underway

# (7.54.3.19) Process for reviewing target

Targets are reviewed during LG&E and KU's integrated resource planning process to ensure proper alignment in our clean energy transition. [Add row]

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	`Numeric input
To be implemented	0	`Numeric input
Implementation commenced	0	`Numeric input
Implemented	14	310954
Not to be implemented	0	`Numeric input

[Fixed row]

# (7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.

#### Row 1

## (7.55.2.1) Initiative category & Initiative type

#### **Energy efficiency in buildings**

✓ Other, please specify :Demand side management programs (electricity)

## (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

105627

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

Select all that apply

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

#### (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

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

121267105

### (7.55.2.7) Payback period

Select from:

✓ No payback

#### (7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

#### (7.55.2.9) Comment

RIE: RIE has a long-standing history of robust energy efficiency programs for residential and commercial customers. Measures cover energy efficiency in buildings and in production processes. The 2023 programs created electric cost savings of 180M for Rhode Island customers over the life of the installed energy efficiency measures. Note: Payback period is applicable to customers and varies based on each project.

#### Row 2

## (7.55.2.1) Initiative category & Initiative type

#### **Energy efficiency in buildings**

☑ Other, please specify: Demand side management programs (gas)

# (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

17034

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

Select all that apply

✓ Scope 3 category 11: Use of sold products

## (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

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

29565600

#### (7.55.2.7) Payback period

Select from:

✓ No payback

#### (7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

#### (7.55.2.9) Comment

RIE: Measures cover gas energy efficiency in buildings and in production processes. The 2023 programs created gas cost savings of 80M for Rhode Island customers over the life of the installed energy efficiency measures. RIE achieved 3,005,293 lifetime MMBtu which equates to 85% of target set forth for the 2023 program year by Three-Year Plan. Note: Payback period is applicable to customers and varies based on each project.

#### Row 3

## (7.55.2.1) Initiative category & Initiative type

#### **Energy efficiency in buildings**

✓ Other, please specify :Demand side management programs (electricity)

## (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

50467

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

Select all that apply

✓ Scope 1

# (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

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

15051778

# (7.55.2.7) Payback period

Select from:

✓ No payback

## (7.55.2.8) Estimated lifetime of the initiative

Select from:

**✓** 6-10 years

## (7.55.2.9) Comment

LG&E and KU: In 2023 LG&E and KU invested 15M in Demand Side Management Programs, which includes: • Low-Income Weatherization Program •Advanced Metering Program Residential and Commercial Demand Response Programs, • Nonresidential Rebates Program LG&E and KU generates and delivers electricity, as such these initiatives directly reduced Scope 1 emissions. Note: Payback period is applicable to customers and varies based on each project.

#### Row 4

# (7.55.2.1) Initiative category & Initiative type

#### **Fugitive emissions reductions**

✓ Other, please specify :Reduction of SF6 emissions

## (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

50948

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

Select all that apply

✓ Scope 1

#### (7.55.2.4) Voluntary/Mandatory

Select from:

✓ Voluntary

#### (7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

# (7.55.2.9) Comment

LG&E and KU: Reductions are the 12-year average reduction in 2023 emissions compared to 2010 emissions. LG&E and KU are replacing equipment to reduce SF6 emissions (O&M expense). Note: Payback period not calculated

#### Row 5

#### (7.55.2.1) Initiative category & Initiative type

#### **Fugitive emissions reductions**

✓ Oil/natural gas methane leak capture/prevention

# (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

0.11

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

Select all that apply

✓ Scope 1

#### (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

#### (7.55.2.8) Estimated lifetime of the initiative

Select from:

**✓** 11-15 years

#### (7.55.2.9) Comment

LG&E and KU: LG&E and KU are using advanced in-line inspection tools to identify gas leaks more quickly and effectively. Note: Calculated by calculating annual difference for Subpart W LDC Service Line emissions (i.e 2022 9.6 metric tons minus 2023 9.49 metric tons 0.11 mt CO2e). Note: Payback period not calculated

#### Row 6

#### (7.55.2.1) Initiative category & Initiative type

#### Company policy or behavioral change

☑ Other, please specify: Carbon sequestration

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

Select all that apply

✓ Scope 3: Other (downstream)

## (7.55.2.4) Voluntary/Mandatory

Select from:

✓ Voluntary

#### (7.55.2.7) Payback period

Select from:

✓ No payback

# (7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

# (7.55.2.9) 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 59,000 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 at least 3,325 tons of CO2. Actual annual sequestration is dependent on success rate of plants.

#### Row 7

## (7.55.2.1) Initiative category & Initiative type

#### **Fugitive emissions reductions**

☑ Other, please specify :Fugitive emissions from lawncare

## (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

0.59

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

Select all that apply

✓ Scope 3 category 1: Purchased goods & services

# (7.55.2.4) Voluntary/Mandatory

Select from:

✓ Voluntary

#### (7.55.2.7) Payback period

Select from:

✓ No payback

## (7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

# (7.55.2.9) Comment

LG&E and KU: LG&E and KU has a livestock vegetation management project for the solar generation sites to develop a sustainable model for using sheep to manage up to 32.5 acres, while substantially increasing the beneficial use of the land at solar generation sites. The ongoing use of sheep for vegetation management is expected to reduce costs by 30% compared to mowing and reduce mowing related emissions.

#### Row 8

#### (7.55.2.1) Initiative category & Initiative type

#### **Energy efficiency in buildings**

☑ Other, please specify: Customer energy efficiency programs reducing consumption and peak demands

# (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

74719

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

Select all that apply

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

#### (7.55.2.4) Voluntary/Mandatory

Select from:

Mandatory

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

29240000

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

49660393

#### (7.55.2.7) Payback period

Select from:

✓ No payback

## (7.55.2.8) Estimated lifetime of the initiative

Select from:

**☑** 11-15 years

## (7.55.2.9) 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 current phase of Act 129 began on June 1, 2021, with PPL Electric having already submitted and received PA PUC approval for its next phase plan. PPL Electric total energy savings for CY2023 was 203,117 MWh. Note: Payback period is applicable to customers and varies based on each project.

#### Row 9

#### (7.55.2.1) Initiative category & Initiative type

#### Company policy or behavioral change

☑ Other, please specify: Carbon sequestration

# (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

211

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

Select all that apply

✓ Scope 3: Other (downstream)

#### (7.55.2.4) Voluntary/Mandatory

Select from:

✓ Voluntary

## (7.55.2.6) Investment required (unit currency - as specified in C0.4)

9000

#### (7.55.2.7) Payback period

Select from:

✓ No payback

#### (7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

## (7.55.2.9) 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. Investment required reflects costs since program inception. 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 2022, PPL Electric has realized 908,702 lbs. of CO2 sequestration through this tree program. The program is funded in the current budget and by 2024 it is estimated a total CO2 sequestration of approximately 21.9 million lbs. will have been realized. Note actual annual sequestration is dependent on success rate of plants.

#### **Row 10**

#### (7.55.2.1) Initiative category & Initiative type

#### Company policy or behavioral change

✓ Supplier engagement

## (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

86

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

Select all that apply

✓ Scope 3 category 1: Purchased goods & services

#### (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

#### (7.55.2.7) Payback period

Select from:

✓ No payback

#### (7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

#### (7.55.2.9) 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.

#### **Row 11**

## (7.55.2.1) Initiative category & Initiative type

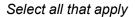
#### Low-carbon energy consumption

✓ Solar PV

#### (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

235

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



✓ Scope 1

# (7.55.2.4) Voluntary/Mandatory

Select from:

✓ Voluntary

# (7.55.2.7) Payback period

Select from:

# (7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

#### (7.55.2.9) Comment

PPL Electric: The first major solar project was completed at our Quarryville Service Center. This system produced 43.2 MWh in 2022. The CO2 equivalency since 2018 installation is 67.4 metric tonnes CO2. PPL Electric also uses solar for water heating at their facilities in Lancaster and Hazleton Service Centers, as well as the Walbert Training Center.

#### **Row 12**

# (7.55.2.1) Initiative category & Initiative type

#### **Fugitive emissions reductions**

✓ Other, please specify :Reduction of SF6 emissions

# (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

476

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

Select all that apply

✓ Scope 1

## (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

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

76500000

## (7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

#### (7.55.2.9) 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.

PPL Electric utilizes a compounded annualized growth rate (CAGR) approach to represent reductions in CO2e emissions related to SF6 since 2010. Currently, PPL Electric CO2 emissions are reducing at an annualized rate of 14.6% since 2010. PPL Electric has improved its leak rate performance faster than industry peers while increasing the total SF6 gas on the system by 209%. PPL Electric is below reporting thresholds. Note: Payback period has not been calculated

#### **Row 13**

#### (7.55.2.1) Initiative category & Initiative type

#### **Energy efficiency in buildings**

✓ Maintenance program

## (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

8338

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

Select all that apply

✓ Scope 2 (market-based)

# (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

#### (7.55.2.7) Payback period

Select from:

## (7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

#### (7.55.2.9) Comment

PPL Corporate: PPL will undertake facilities planning to reduce emissions associated with our electric and gas use, including increasing renewables consumption for our owned buildings. We have already begun to identify opportunities to serve our energy needs through clean energy options. Developed in 2021 and publicly announced in April 2022, PPL has set a goal to decrease electricity use in buildings 28% by 2030 from a 2019 baseline. In 2022, RIE set the same goal with a 2022 baseline. Payback calculated for energy efficiency maintenance programs are project dependent.

#### **Row 14**

#### (7.55.2.1) Initiative category & Initiative type

#### **Transportation**

☑ Company fleet vehicle replacement

#### (7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

2812

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

Select all that apply

✓ Scope 1

## (7.55.2.4) Voluntary/Mandatory

Select from:

Voluntary

#### (7.55.2.7) Payback period

Select from:

# (7.55.2.8) Estimated lifetime of the initiative

Select from:

Ongoing

#### (7.55.2.9) Comment

PPL Corporation: Our goals include electrifying 50% of medium/heavy duty vehicles by 2030; 100% of light-duty vehicles and indoor forklifts by 2030; and converting 80% of heavy-duty vehicles with electric lift technology (ePTO) by 2025 (PPL Electric) and 2030 (LG&E and KU and RIE). [Add row]

#### (7.55.3) What methods do you use to drive investment in emissions reduction activities?

#### Row 1

## (7.55.3.1) Method

Select from:

☑ Compliance with regulatory requirements/standards

#### (7.55.3.2) Comment

Regulatory requirements related to energy efficiency and reliability standards, coupled with proactive efforts to support customer DER integration, are driving smart grid investments.

#### Row 2

#### (7.55.3.1) Method

Select from:

✓ Dedicated budget for energy efficiency

## (7.55.3.2) Comment

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. CY2023 figures alone resulted in nearly 29 million in rebates and over 49 million in total investments.

#### Row 3

#### (7.55.3.1) Method

Select from:

☑ Financial optimization calculations

#### (7.55.3.2) Comment

Financial calculations have driven investments in grid modernization, resulting in operational efficiencies and reduced greenhouse gas emissions. Financial calculations have also driven decisions regarding the most beneficial arrangements for renewable energy ownership vs. leases or PPAs.

#### Row 4

#### (7.55.3.1) Method

Select from:

✓ Partnering with governments on technology development

# (7.55.3.2) Comment

PPL's utilities in PA and KY have partnered with the U.S. Department of Energy and other public sector institutions on several ongoing demonstration projects. Further, PPL Electric and RIE were selected to receive up to 100 million in federal funding to advance grid modernization and decarbonization efforts through the Bipartisan Infrastructure Law.

#### Row 5

## (7.55.3.1) Method

Select from:

✓ Dedicated budget for energy efficiency

#### (7.55.3.2) Comment

PPL Corporation has made multi-year commitments to clean energy research and development partnerships and has a dedicated budget for research and development for clean energy technology research and development.

#### Row 6

#### (7.55.3.1) Method

Select from:

✓ Dedicated budget for other emissions reduction activities

#### (7.55.3.2) Comment

LG&E and KU and PPL Electric are in the implementation stage of replacing SF6 breakers with vacuum breakers on 69kV transformers. [Add row]

#### (7.74.1) Provide details of your products and/or services that you classify as low-carbon products.

#### Row 1

### (7.74.1.1) Level of aggregation

Select from:

✓ Product or service

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

Select from:

✓ Low-Carbon Investment (LCI) Registry Taxonomy

## (7.74.1.3) Type of product(s) or service(s)

#### **Power**

✓ Solar PV

#### (7.74.1.4) Description of product(s) or service(s)

LG&E and KU: 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 receive monthly bill credits based on the production of the array. Each Business Solar install requires contract approval by the KY Public Service Commission.

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

Select from:

Yes

#### (7.74.1.6) Methodology used to calculate avoided emissions

Select from:

☑ Estimating and Reporting the Comparative Emissions Impacts of Products (WRI)

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

Select from:

✓ Use stage

#### (7.74.1.8) Functional unit used

LKE: 201 MWh \* 0.853 mt CO2e/MWh

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

Select from:

✓ Use stage

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

171

#### (7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

LG&E and KU's Business Solar Program MWh is used to calculate the avoided emissions.

#### Row 2

## (7.74.1.1) Level of aggregation

Select from:

✓ Product or service

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

Select from:

✓ Low-Carbon Investment (LCI) Registry Taxonomy

## (7.74.1.3) Type of product(s) or service(s)

#### **Power**

✓ Solar PV

#### (7.74.1.4) Description of product(s) or service(s)

LG&E and KU: 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.

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

Select from:

Yes

#### (7.74.1.6) Methodology used to calculate avoided emissions

Select from:

☑ Estimating and Reporting the Comparative Emissions Impacts of Products (WRI)

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

Select from:

✓ Use stage

## (7.74.1.8) Functional unit used

LKE: 3,599 MWh \* 0.853 mt CO2e/MWh

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

Select from:

✓ Use stage

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

3070

# (7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

LG&E and KU's Community Solar Program MWh is used to calculate avoided emissions.

#### Row 3

## (7.74.1.1) Level of aggregation

Select from:

✓ Product or service

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

Select from:

✓ Low-Carbon Investment (LCI) Registry Taxonomy

#### (7.74.1.3) Type of product(s) or service(s)

#### **Power**

✓ Solar PV

## (7.74.1.4) Description of product(s) or service(s)

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.

#### Row 4

## (7.74.1.1) Level of aggregation

Select from:

✓ Product or service

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

Select from:

✓ Low-Carbon Investment (LCI) Registry Taxonomy

#### (7.74.1.3) Type of product(s) or service(s)

#### **Power**

Solar PV

## (7.74.1.4) Description of product(s) or service(s)

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: (1) 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). (2) 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). (3) 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 received a CPCN from KY PSC in 2022 for construction.

In 2023, KY PSC granted approval for LKE to build a 120 MW solar array in Mercer County and to acquire a solar array being built in Marion County.

#### Row 5

### (7.74.1.1) Level of aggregation

Select from:

✓ Product or service

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

Select from:

✓ Low-Carbon Investment (LCI) Registry Taxonomy

#### (7.74.1.3) Type of product(s) or service(s)

#### **Power**

✓ Solar PV

#### (7.74.1.4) Description of product(s) or service(s)

PPL Electric: PPL Electric's Distributed Energy Resource Management System helps PPL Electric integrate more distributed energy resources like private solar while preserving network reliability and power quality. To date, PPL Electric has connected nearly 400 megawatts of renewable energy to the grid.

#### Row 6

### (7.74.1.1) Level of aggregation

Select from:

✓ Product or service

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

Select from:

✓ Low-Carbon Investment (LCI) Registry Taxonomy

#### (7.74.1.3) Type of product(s) or service(s)

#### **Power**

☑ Other, please specify: Energy efficiency

#### (7.74.1.4) Description of product(s) or service(s)

PPL Electric: Alternative Energy Portfolio: 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 2023 this was required to be 18% from renewable and low-carbon sources. These services have no impact on revenue.

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

Select from:

Yes

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

Select from:

Use stage

### (7.74.1.8) Functional unit used

PPL Electric: Purchased electricity CO2e\*18%

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

Select from:

✓ Not applicable

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

707573

### (7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

For PPL Electric, the Alternative Energy Portfolio Standards Act requires Pennsylvania Electric Distribution Companies to purchase 18% from renewable and low-carbon sources. CO2e savings are calculated using the 18% of renewable and low-carbon sources for PPL Electric's purchase power.

#### Row 7

# (7.74.1.1) Level of aggregation

Select from:

✓ Product or service

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

Select from:

✓ Low-Carbon Investment (LCI) Registry Taxonomy

### (7.74.1.3) Type of product(s) or service(s)

#### **Power**

✓ Other, please specify :Energy efficiency

#### (7.74.1.4) Description of product(s) or service(s)

RIE: RIE's Renewable Energy Standard that requires all obligated entities to obtain a certain percentage of the electricity they sell at retail to Rhode Island end-use customers, adjusted for electric line losses, from eligible renewable energy resources, escalating annually until reaching 100% in 2033. In 2023, RIE was required to meet 23% renewable electricity.

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

Select from:

Yes

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

Select from:

✓ Use stage

### (7.74.1.8) Functional unit used

RIE: Purchased electricity CO2e\*23%

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

Select from:

✓ Not applicable

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

238661

#### (7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

In 2023, RIE was required to meet 23% renewable electricity. CO2e savings are calculated using the 23% of renewable and low-carbon sources for RIE's purchase power.

#### Row 8

# (7.74.1.1) Level of aggregation

Select from:

✓ Product or service

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

Select from:

✓ Low-Carbon Investment (LCI) Registry Taxonomy

#### (7.74.1.3) Type of product(s) or service(s)

#### **Power**

☑ Other, please specify :Renewable energy storage and connections to grid

### (7.74.1.4) Description of product(s) or service(s)

RIE: RIE offers two customer programs to encourage local renewable energy connections. About 620 megawatts of renewable energy nameplate capacity has been connected by year-end 2023.

#### Row 9

### (7.74.1.1) Level of aggregation

Select from:

✓ Product or service

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

Select from:

✓ Low-Carbon Investment (LCI) Registry Taxonomy

### (7.74.1.3) Type of product(s) or service(s)

#### **Power**

☑ Other, please specify :Advanced metering and grid modernization

# (7.74.1.4) Description of product(s) or service(s)

RIE: RIE is pursuing regulatory approvals of advanced metering functionality and grid modernization, both of which would result in overall energy savings for customers and associated greenhouse gas emissions reductions. See the following filings (specifically the benefit-cost assessments) for some estimates of magnitude. RIPUC Docket 22-49 and 22-53.

[Add row]

#### **C9. Environmental performance - Water security**

#### (9.1.1) Provide details on these exclusions.

#### Row 1

### (9.1.1.1) Exclusion

Select from:

☑ Other, please specify: Non-generation facilities including call centers, office buildings and administration sites, unmanned facilities (i.e. substations), and other sites unrelated to direct energy generation.

#### (9.1.1.2) Description of exclusion

Exclusions include non-generation facilities including call centers, office buildings and administration sites, unmanned facilities (i.e. substations), and other sites unrelated to direct energy generation.

### (9.1.1.3) Reason for exclusion

Select from:

☑ Other, please specify :Company water consumption occurs mainly in generation facilities. Non-generation facilities' water consumption is de minimus at this time.

#### (9.1.1.7) Percentage of water volume the exclusion represents

Select from:

**✓** 1-5%

### (9.1.1.8) Please explain

Exclusions include non- generation facilities including call centers, office buildings and administration sites, unmanned facilities (i.e. substations), and other sites unrelated to direct energy generation. Company water consumption occurs mainly in generation facilities. Non-generation facilities' water consumption is de minimus at this time. Zero PPL operations are located in areas of water stress.

[Add row]

(9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?	
Water withdrawals – total volumes	
(9.2.1) % of sites/facilities/operations	
Select from:  ☑ 100%	
(9.2.2) Frequency of measurement	
Select from:  ☑ Continuously	
(9.2.3) Method of measurement	
Meter reads	
Water withdrawals – volumes by source	
(9.2.1) % of sites/facilities/operations	
Select from:  ☑ 100%	
(9.2.2) Frequency of measurement	
Select from:  ✓ Continuously	

Meter reads

(9.2.3) Method of measurement

### Water discharges - total volumes

# (9.2.1) % of sites/facilities/operations

Select from:

**☑** 100%

### (9.2.2) Frequency of measurement

Select from:

Continuously

### (9.2.3) Method of measurement

Meter reads

#### Water discharges - volumes by destination

### (9.2.1) % of sites/facilities/operations

Select from:

**☑** 100%

### (9.2.2) Frequency of measurement

Select from:

Continuously

### (9.2.3) Method of measurement

Meter reads

#### Water consumption - total volume

# (9.2.1) % of sites/facilities/operations

Select from:		
<b>☑</b> 100%		

### (9.2.2) Frequency of measurement

Select from:

Continuously

### (9.2.3) Method of measurement

Meter reads

#### Water recycled/reused

### (9.2.1) % of sites/facilities/operations

Select from:

**☑** 100%

### (9.2.2) Frequency of measurement

Select from:

Continuously

### (9.2.3) Method of measurement

Meter reads [Fixed row]

(9.2.1) For your hydropower operations, what proportion of the following water aspects are regularly measured and monitored?

**Fulfilment of downstream environmental flows** 

# (9.2.1.1) % of sites/facilities/operations measured and monitored Select from: **1**00% **Sediment loading** (9.2.1.1) % of sites/facilities/operations measured and monitored Select from: **100%** [Fixed row] (9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change? **Total withdrawals** (9.2.2.1) Volume (megaliters/year) 379422 (9.2.2.2) Comparison with previous reporting year Select from: Lower

#### (9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in efficiency

#### **Total discharges**

# (9.2.2.1) Volume (megaliters/year)

349093

### (9.2.2.2) Comparison with previous reporting year

Select from:

Higher

### (9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

✓ Other, please specify: Due to rainfall captured in metered ponds.

#### **Total consumption**

#### (9.2.2.1) Volume (megaliters/year)

30329

### (9.2.2.2) Comparison with previous reporting year

Select from:

Lower

### (9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in efficiency

[Fixed row]

(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change.

Withdrawals are from areas with water stress
Select from:  ✓ No

[Fixed row]

(9.2.7) Provide total water withdrawal data by source.

Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

### (9.2.7.1) Relevance

Select from:

Relevant

# (9.2.7.2) Volume (megaliters/year)

379422

# (9.2.7.3) Comparison with previous reporting year

Select from:

✓ Lower

### (9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

✓ Increase/decrease in efficiency

[Fixed row]

(9.2.8) Provide total water discharge data by destination.

#### Fresh surface water

### (9.2.8.1) Relevance

Select from:

Relevant

### (9.2.8.2) Volume (megaliters/year)

349093

### (9.2.8.3) Comparison with previous reporting year

Select from:

Higher

#### (9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

✓ Other, please specify :Due to rainfall captured in metered ponds. [Fixed row]

(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

#### **Direct operations**

## (9.3.1) Identification of facilities in the value chain stage

Select from:

☑ Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

#### (9.3.2) Total number of facilities identified

4

#### (9.3.3) % of facilities in direct operations that this represents

Select from:

**✓** 1-25

### (9.3.4) Please explain

LG&E and KU generation facilities monitor and comply with all state and local water quality standards when the water leaves our facilities. Information on this can be found in the state report at https://eec.ky.gov/Environmental-Protection/Water/Monitor/Pages/Assessments.aspx

#### **Upstream value chain**

#### (9.3.1) Identification of facilities in the value chain stage

Select from:

☑ Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

### (9.3.2) Total number of facilities identified

4

### (9.3.4) Please explain

Zero PPL facilities are in areas of water stress. [Fixed row]

(9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Row 1

#### (9.3.1.1) Facility reference number

Select from:

✓ Facility 1

### (9.3.1.2) Facility name (optional)

Ghent

### (9.3.1.3) Value chain stage

Select from:

✓ Direct operations

### (9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

- ✓ Dependencies
- Impacts
- Risks
- Opportunities

### (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

✓ Yes, withdrawals and discharges

### (9.3.1.7) Country/Area & River basin

#### **United States of America**

✓ Other, please specify :Ohio River Valley

### (9.3.1.8) Latitude

### (9.3.1.9) Longitude

-85.035

### (9.3.1.10) Located in area with water stress

Select from:

✓ No

#### (9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

✓ Coal - hard

#### (9.3.1.13) Total water withdrawals at this facility (megaliters)

97772

### (9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

97772

### (9.3.1.21) Total water discharges at this facility (megaliters)

101690

### (9.3.1.23) Discharges to fresh surface water

101690

### (9.3.1.27) Total water consumption at this facility (megaliters)

-3918

### (9.3.1.29) Please explain

Due to rainfall captured in metered ponds.

#### Row 2

### (9.3.1.1) Facility reference number

Select from:

✓ Facility 2

# (9.3.1.2) Facility name (optional)

Cane Run

### (9.3.1.3) Value chain stage

Select from:

✓ Direct operations

## (9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

- Dependencies
- Impacts
- Risks
- Opportunities

### (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

✓ Yes, withdrawals and discharges

### (9.3.1.7) Country/Area & River basin

#### **United States of America**

☑ Other, please specify :Ohio River Valley

### (9.3.1.8) Latitude

38.1815

### (9.3.1.9) Longitude

-85.8868

#### (9.3.1.10) Located in area with water stress

Select from:

✓ No

#### (9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

✓ Coal - hard

### (9.3.1.13) Total water withdrawals at this facility (megaliters)

4739

### (9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

4739

### (9.3.1.21) Total water discharges at this facility (megaliters)

1419

#### (9.3.1.23) Discharges to fresh surface water

### (9.3.1.27) Total water consumption at this facility (megaliters)

3320

#### Row 3

# (9.3.1.1) Facility reference number

Select from:

✓ Facility 3

### (9.3.1.2) Facility name (optional)

Mill Creek

### (9.3.1.3) Value chain stage

Select from:

✓ Direct operations

### (9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

- ✓ Dependencies
- ✓ Impacts
- ✓ Risks
- Opportunities

# (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

✓ Yes, withdrawals and discharges

#### (9.3.1.7) Country/Area & River basin

#### **United States of America**

✓ Other, please specify :Ohio River Valley

#### (9.3.1.8) Latitude

38.0501

### (9.3.1.9) Longitude

-85.9076

### (9.3.1.10) Located in area with water stress

Select from:

✓ No

### (9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

✓ Coal - hard

### (9.3.1.13) Total water withdrawals at this facility (megaliters)

208102

#### (9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

208102

### (9.3.1.21) Total water discharges at this facility (megaliters)

223427

### (9.3.1.23) Discharges to fresh surface water

223427

### (9.3.1.27) Total water consumption at this facility (megaliters)

-15325

### (9.3.1.29) Please explain

Due to rainfall captured in metered ponds.

#### Row 4

### (9.3.1.1) Facility reference number

Select from:

✓ Facility 4

### (9.3.1.2) Facility name (optional)

Trimble County

# (9.3.1.3) Value chain stage

Select from:

✓ Direct operations

### (9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

- ✓ Dependencies
- ✓ Impacts
- ✓ Risks
- Opportunities

### (9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

✓ Yes, withdrawals and discharges

#### (9.3.1.7) Country/Area & River basin

#### **United States of America**

✓ Other, please specify :Ohio River Valley

#### (9.3.1.8) Latitude

38.584751

# (9.3.1.9) Longitude

-85.411645

### (9.3.1.10) Located in area with water stress

Select from:

✓ No

# (9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

✓ Coal - hard

### (9.3.1.13) Total water withdrawals at this facility (megaliters)

55247

### (9.3.1.15) Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

### (9.3.1.21) Total water discharges at this facility (megaliters)

19240

#### (9.3.1.23) Discharges to fresh surface water

19240

### (9.3.1.27) Total water consumption at this facility (megaliters)

36007 [Add row]

(9.3.2) For the facilities in your direct operations referenced in 9.3.1, what proportion of water accounting data has been third party verified?

Water withdrawals - total volumes

### (9.3.2.1) % verified

Select from:

✓ Not verified

Water withdrawals - volume by source

### (9.3.2.1) % verified

Select from:

✓ Not verified

Water withdrawals - quality by standard water quality parameters

### (9.3.2.1) % verified

Select from:

✓ Not verified

Water discharges - total volumes

# (9.3.2.1) % verified

Select from:

✓ Not verified

Water discharges - volume by destination

# (9.3.2.1) % verified

Select from:

✓ Not verified

Water discharges - volume by final treatment level

# (9.3.2.1) % verified

Select from:

✓ Not verified

Water discharges – quality by standard water quality parameters

# (9.3.2.1) % verified

Select from:

✓ Not verified

Water consumption - total volume

### (9.3.2.1) % verified

Select from:

✓ Not verified [Fixed row]

### (9.5) Provide a figure for your organization's total water withdrawal efficiency.

Revenue (currency)	Total water withdrawal efficiency
8312000000	21907.01

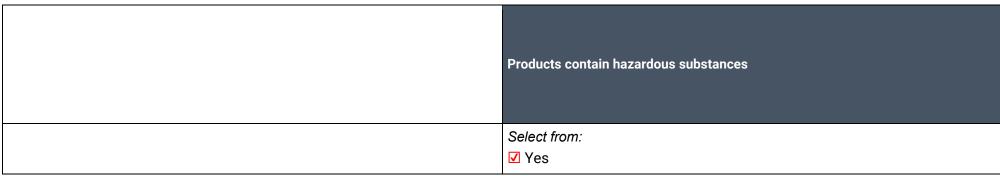
[Fixed row]

#### (9.7.1) Provide the following intensity information associated with your electricity generation activities.

	Water intensity value (m3/denominator)	Numerator: water aspect	Denominator
Row 1	0.01	Select from:  ✓ Total water withdrawals	Select from:  ☑ MWh

[Add row]

### (9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?



[Fixed row]

# (9.13.1) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

#### Row 1

#### (9.13.1.1) Regulatory classification of hazardous substances

Select from:

☑ Federal Water Pollution Control Act / Clean Water Act (United States Regulation)

#### (9.13.1.2) % of revenue associated with products containing substances in this list

Select from:

✓ Less than 10%

#### (9.13.1.3) Please explain

In 2023, over 71.9% of the coal combustion residuals generated by LG&E and KU were recycled for manufacturing wallboard and cement. LG&E and KU have closed 18 coal combustion residuals wet storage impoundments. Only three facilities remain, with construction for closure expected to be complete in 2025. Complying with the coal combustion residuals rule, no sluiced materials are sent for treatment to any of our utilities' wet coal combustion residuals storage impoundments. [Add row]

#### (9.14) Do you classify any of your current products and/or services as low water impact?

#### (9.14.1) Products and/or services classified as low water impact

Select from:

Yes

#### (9.14.4) Please explain

Our water management strategy includes:

- Paying consumptive use fees to cover the costs of reservoir projects and storage space designed to benefit all users and maintain adequate river levels during low flow periods.
- Utilizing closed-cycle cooling at our generating plants to reduce the volume of cooling water withdrawn from the region's watershed.
- A Groundwater Protection Plan
- A Stormwater Best Management Practices Plan
- A Spill Prevention Control and Countermeasure plan that facilitates the safe storage of chemicals and oils on site.

Proper secondary containment and monthly tank inspections ensure chemicals remain out of the watershed and groundwater. The companies also continue to decrease consumptive water use as they improve power plant efficiency and have transitioned to dry-ash handling at remaining coal-fired power plants in Kentucky. [Fixed row]

#### (9.15.3) Why do you not have water-related target(s) and what are your plans to develop these in the future?

### (9.15.3.1) Primary reason

Select from:

✓ Important but not an immediate business priority

#### (9.15.3.2) Please explain

All PPL operations comply with local, state, and federal clean water regulations. Zero PPL operations are located in areas of water stress. [Fixed row]

#### C11. Environmental performance - Biodiversity

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

### (11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

Select from:

☑ Yes, we are taking actions to progress our biodiversity-related commitments

#### (11.2.2) Type of action taken to progress biodiversity-related commitments

Select all that apply

- ✓ Land/water protection
- ✓ Land/water management
- ✓ Species management
- ☑ Education & awareness

[Fixed row]

#### (11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Select from:	Select all that apply
✓ Yes, we use indicators	☑ State and benefit indicators
	✓ Pressure indicators

Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
	✓ Response indicators

[Fixed row]

(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

#### Legally protected areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

✓ No

### **UNESCO World Heritage sites**

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

✓ No

#### **UNESCO Man and the Biosphere Reserves**

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

✓ No

#### Ramsar sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

✓ No

#### **Key Biodiversity Areas**

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

✓ No

#### Other areas important for biodiversity

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity\_\_\_\_\_\_\_\_

Select from:

Yes

#### (11.4.2) Comment

PPL's environmental management system helps our operating companies comply with applicable regulations, minimize our impact on the environment, and continually improve our processes. We implement and maintain systems and procedures to provide a systematic approach to managing activities that could impact the environment and ensure that we meet or exceed environmental laws and regulations.

PPL's biodiversity practices comply with state, federal and local regulations. In addition, our operating companies work extensively to ensure the environment is protected while work is being done on the electrical and natural gas delivery systems, especially in sensitive resource areas. We recognize the importance of conserving natural habitats and native species and work with various partners to protect biodiversity.

[Fixed row]

# (11.4.1) Provide details of your organization's activities in the reporting year located in or near to areas important for biodiversity.

#### Row 1

### (11.4.1.2) Types of area important for biodiversity

Select all that apply

✓ Other areas important for biodiversity

#### (11.4.1.4) Country/area

Select from:

✓ United States of America

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

We implement and maintain systems and procedures to provide a systematic approach to managing activities that could impact the environment and ensure that we meet or exceed environmental laws and regulations. An enterprise-wide director of environmental compliance oversees environmental compliance and management and reports to the senior vice president of engineering and construction. Our biodiversity strategy includes:

- Ensuring compliance with all state and federal regulatory requirements related to habitat management, watershed management, biodiversity preservation and ecosystem restoration.
- Adopting comprehensive Avian Protection Plans to protect birds from coming in contact with electrical equipment and power lines.
- Using pollinator-supportive and native plants as part of construction, maintenance and restoration activities where practical.
- Implementing habitat mitigation practices to prevent or reduce detrimental effects on biodiversity from company actions and ongoing operations, wherever possible.
- Partnering with state and nongovernmental agencies to identify and protect species of concern in proposed work areas before work is executed and permits are requested.
- Engaging with stakeholders when planning, building and operating our energy infrastructure.
- Supporting community initiatives to protect the environment through charitable contributions, volunteerism and direct engagement on restoration efforts.

#### C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

### (13.1.1) Other environmental information included in your CDP response is verified and/or assured by a third party

Select from:

☑ No, but we plan to obtain third-party verification/assurance of other environmental information in our CDP response within the next two years

# (13.1.3) Explain why other environmental information included in your CDP response is not verified and/or assured by a third party

PPL's voluntary environmental disclosures are reviewed by the company's leadership team, including the chief executive officer. The Corporate Audit department has conducted reviews related to the compilation of this report, including in-depth reviews of specific metrics, as part of ongoing controls related to voluntary sustainability reporting. While external assurance has not been conducted, as we transition to mandatory disclosures we plan to obtain third-party assurance.

[Fixed row]

# (13.2) 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.

#### (13.2.1) Additional information

This CDP Climate Change Response ("Response") contains forward-looking statements regarding, among other things, the clean energy transition, our clean energy targets and achievement of climate commitments by certain dates, strategies or goals related to environmental, social, safety and governance performance, future energy demand, the availability and cost of natural gas, carbon reduction, third-party decarbonization, 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, projections, goals, targets, expectations, strategy 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 Report 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 Report 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 Commissions. [Fixed row]

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

### (13.3.1) Job title

Vice President, Public Affairs and Sustainability

### (13.3.2) Corresponding job category

Select from:

✓ Other, please specify [Fixed row]