

# ENERGY FORWARD

PPL CORPORATION 2023 EEI-AGA ESG/SUSTAINABILITY REPORT



# Qualitative Section

PPL Corporation, headquartered in Allentown, Pennsylvania, is the parent company to four regulated utility companies. Our regulated utility subsidiaries – Kentucky Utilities, Louisville Gas and Electric, PPL Electric Utilities and Rhode Island Energy – 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.

The qualitative and quantitative data in this report primarily reflects the 2023 calendar year, with relevant 2024 data noted where applicable.

## GOVERNANCE

Strong leadership and well-managed operations are the cornerstones of a successful business. PPL’s corporate governance practices are designed to help ensure long-term value for our shareowners, customers and the communities in which we operate.

### *Sustainability management and oversight*

PPL’s management approach to sustainability engages all levels of the company from the Board of Directors to our employees. PPL’s Board of Directors has designated its Governance, Nominating and Sustainability Committee with responsibility for overseeing PPL’s practices and positions to further ESG performance and sustainability. The committee receives updates, which include climate-related issues, at regularly scheduled meetings.

<p>Governance, Nominating and Sustainability Committee, Board of Directors</p>	<p>Oversees the company’s practices and positions to further its sustainability strategy and corporate governance, including specific environmental and corporate social responsibility initiatives.</p>
<p>Corporate Leadership Council</p>	<p>Reviews, provides strategic input on and approves the company’s sustainability strategy and priorities. Executive leadership (CEO, CFO, COO, CLO, CHRO, CTIO), business segment presidents and the vice president of public affairs and sustainability officer guide the development of the sustainability strategy and enable the integration of sustainability across the enterprise and in the corporate strategy.</p>
<p>Corporate Sustainability Committee</p>	<p>Oversees and establishes sustainability priorities and performance metrics. This committee includes senior leadership membership from operating companies, human resources, compliance, risk, investor relations, controller, legal, supply chain and corporate audit.</p>
<p>Sustainability Core Team</p>	<p>Cross-functional and enterprise-wide team of subject matter experts who conduct analyses of sustainability priority issues and environmental, social and governance trends, and is responsible for developing environmental, social and governance disclosures.</p>

## Enterprise risk management

PPL maintains a robust enterprise risk management process that provides a business portfolio view of material risks that may impact achievement of PPL's business strategy. As part of the enterprise risk management (ERM) process, representatives from PPL's operating companies and service groups identify, assess, monitor and report on ongoing and emerging risks, including broader environmental, social and governance (ESG) risks. The company's Risk Management group oversees this process and reports quarterly to the Audit Committee. Key risks areas, such as climate and cybersecurity, are incorporated into PPL's ERM and business strategy process and are communicated to PPL's board and senior management.

## Climate-related risks and opportunities

Our businesses are subject to physical, market and economic risks relating to potential effects of climate change. Climate change may produce changes in weather or other environmental conditions, including temperature or precipitation levels, and thus may impact consumer demand for electricity. In addition, the potential physical effects of climate change, such as increased frequency and severity of storms, floods, and other climatic events, could disrupt our operations and cause us to incur significant costs to prepare for or respond to these effects. Climate change may also contribute to the heightened risk or severity of wildfires. Though the annual FEMA National Risk Index for wildfires in the jurisdictions where we provide service is very low to relatively moderate, wildfires could disrupt operations and cause us to incur significant costs. These or other meteorological changes could lead to increased operating costs, capital expenses or power purchase costs.

Greenhouse gas regulation could increase the cost of electricity, particularly power generated by fossil fuels, and such increases could have a depressive effect on regional economies. Reduced economic and consumer activity in our service areas – both generally and specific to certain industries and consumers accustomed to previously lower cost power – could reduce demand for the power we generate, market and deliver. Demand for our energy-related services could be similarly lowered by consumers' preferences or market factors favoring energy efficiency, low-carbon power sources or reduced electricity usage.

While PPL prepares for risks, opportunities can also arise as policies and practices shift to address climate change.

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.

Decarbonizing the economy will lead to increased electrification and demand for renewable energy, and the declining cost of renewables 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 retirement of existing coal-fired generation plants at the end of their economic life.

PPL's 2021 [Climate Assessment Report](#) contains a comprehensive analysis of our climate risks and opportunities, including generation transition scenario analysis and clean energy strategy. In 2022, PPL published a [Generation Study](#) expanding analysis of the Fast Transition Future Policy Scenario included in the company's generation scenario analysis. The Fast Transition scenario was one of three scenarios analyzed in the 2021 report. This scenario assumed a future federal policy that requires 100% clean electricity by 2035, which is the expected contribution pathway from the power sector under the U.S. Nationally Determined Contributions (NDC) to the Paris Agreement. The 2022 study further assessed the financial implications and strategic feasibility of meeting an interim requirement of 80% clean electricity by 2030.

## Cybersecurity

PPL's strategy for managing cyber-related risks is risk-based and, where appropriate, integrated within PPL's enterprise risk management processes.

PPL continually invests in security strategies and practices from industry-accepted security control frameworks. Our cybersecurity strategy includes:

- Actively monitoring company systems.
- Regularly reviewing and updating security standards and policies and procedures based upon the threat landscape and industry best practices.
- Conducting incident response and management tabletop exercises for cyber resiliency, at least annually.
- Security awareness and training to improve user behavior and security hygiene.
- Leveraging industry-leading experts to perform risk assessments to learn and improve our protections.
- Routinely participating in industry-wide programs to further information sharing, intelligence gathering and unity of effort in responding to potential or actual attacks.
- A Corporate Security Council that meets quarterly to review and understand risks and direct actions to continually improve PPL's security posture and mitigate cyber risks.

PPL's chief security officer, who reports to the chief technology and innovation officer, leads a dedicated cybersecurity team and is responsible for the design, implementation and execution of the cyber-risk management strategy.

In addition to these enterprise-wide initiatives, PPL's Kentucky, Pennsylvania and Rhode Island operations are subject to extensive and rigorous mandatory cybersecurity requirements that are developed and enforced by NERC and approved by FERC to protect grid security and reliability. Finally, PPL purchases insurance to protect against a wide range of costs that could be incurred in connection with cyber-related incidents.



Cybersecurity and the effectiveness of PPL's cybersecurity strategy are integral and regular topics of discussion at board meetings through presentations by the chief security officer. In 2022, one of PPL's directors obtained certification in cyber risk oversight from the National Association of Corporate Directors.

For more details about how PPL ensures the physical and cyber security of the grid, please see page 57 of the [2023 Corporate Sustainability Report](#).

### **Public policy engagement**

PPL actively encourages public policy that furthers our ability to safely provide reliable and affordable energy to our customers and supports our growth and innovation in ways that benefit our company and our stakeholders. Our active participation in the public policy arena helps to ensure that public officials are kept informed of key issues that affect the interests of our stakeholders.

PPL's Public Affairs department is in regular communication with executive leadership and provides an annual report to the board on key issues and advocacy positions. Additionally, on an annual basis, the board's Governance, Nominating and Sustainability Committee receives a report of corporate political contributions.

Details regarding PPL's approach to public policy engagement, including our corporate climate principles and federal policy views, compliance, trade association membership, political action committees and contributions to certain tax-exempt organizations are available online on [the company's website](#).

The company's transparent reporting has earned a trendsetter ranking by the CPA-Zicklin Index, which benchmarks the political disclosure and accountability policies and practices of leading U.S. public companies.

### **Safety and integrity of natural gas operations**

In addition to providing electricity, PPL's utilities in Kentucky and Rhode Island also own and operate natural gas distribution systems, and we recognize the criticality of the natural gas system in maintaining safe, affordable and reliable energy for our customers as we decarbonize our economy.

LG&E and RIE leadership have overall responsibility for the oversight of natural gas operations. Both companies have integrated industry-leading standards and practices set by the American Petroleum Institute. The companies maintain integrity management plans, including those for transmission, distribution, LNG and storage.

In Kentucky, LG&E's system is made up of over 4,800 miles of natural gas transmission and distribution lines; compressor stations that move the gas through the system to customers; and natural gas storage fields that enable LG&E to purchase gas when costs are low and store it for later use, passing on the savings to customers.

RIE's natural gas system consists of 3,227 miles of natural gas distribution lines.

Both utilities employ comprehensive natural gas safety measures that include 24/7 monitoring by a central Gas Control Room; conducting leak surveys; operating a Pipeline Integrity Management Program that identifies and minimizes potential pipeline risks; and educating community partners and the general public about natural gas safety.

For more details on PPL's natural gas operations, please see page 25 of the [2023 Corporate Sustainability Report](#).

## **SOCIAL RESPONSIBILITY**

PPL's ESG commitments related to social responsibility include exceeding customer expectations, fostering an exceptional workplace and strengthening the communities we serve.

Achievements in 2023 include:

- Supporting diverse businesses – those owned by minorities, women and veterans (covering tier 1 and 2 suppliers). In 2023, the company spent \$399 million with diverse businesses. Additionally, 37% of goods and services are procured from locally based suppliers, providing economic development support to communities in our jurisdiction.
- Educating customers on energy efficiency programs to help them reduce energy consumption and keep costs down. Energy efficiency programs across PPL's utilities helped customers save nearly 368,000 megawatt-hours of electricity and reduced peak demand by more than 76 megawatts.
- PPL's utilities have helped connect customers to more than \$47 million in energy assistance in 2023 through funds generated by employee and customer donations, state and federal programs, local agencies, foundation grants and other sources. Our customer service teams helped more than 231,000 customers across our service territories in Kentucky, Pennsylvania, Rhode Island and Virginia.
- In addition, PPL's operating companies and affiliated foundations 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.

### **Diversity, equity and inclusion**

We continue to work together to achieve greater diversity, equity and inclusion (DEI) in our workplaces and communities. PPL views this as a strategic imperative that enhances our customer insight and fuels innovation and growth. The company rewards positive performance, enables professional development and encourages employee engagement while developing a culture of belonging, empowerment and empathy. We are dedicated to making a long-lasting impact through enterprise-wide DEI efforts. Progress in 2023 includes:

- Increased the number of women in leadership positions to 36%, up from 23.8% in 2020.
- Increased the number of ethnically and racially diverse employees in leadership positions to 17%, up from

8.6% in 2020.

- Identified and partnered with influential community leaders to reach a diverse demographic for candidate sourcing and recruiting purposes.
- Conducted annual pay-equity reviews.
- Continued participation in the Energy Impact Partners' Elevate Council, focused on funding for diverse businesses advancing clean energy technologies.
- Engaged with minority-owned and diverse financial firms that provide advisory services and participate in financing transactions for PPL and its operating companies.

For more information on DEI activities, please see page 45-46 of the [2023 Corporate Sustainability Report](#).

## **CLEAN ENERGY TRANSITION STRATEGY**

PPL's corporate governance and management practices are designed to help ensure long-term value for our shareowners, customers and the communities in which we operate. We have adopted a goal to reduce our carbon emissions to net-zero by 2050 and linked executive incentive compensation to several goals aimed at climate-related and ESG performance.

Our balanced clean energy transition strategy is designed to deliver an affordable, reliable and resilient clean energy future for our customers and communities. We continue to evaluate our infrastructure investment plans with this clean energy strategy in mind to ensure a successful transition. The four pillars of our strategy are:

- Decarbonizing our generation.
- Decarbonizing our non-generation operations.
- Driving digital innovation and research and development to enable new technologies.
- Positioning the grid as an enabler for clean energy resources.

### ***Decarbonize our generation***

In 2023, we continued to make progress toward our goal to achieve net-zero carbon emissions by 2050; as of Dec. 31, 2023, we have reduced carbon emissions nearly 59% from 2010 levels. We are progressing 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.

In November 2023, LG&E and KU 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 are expected to reduce the company's carbon intensity by more than 20%.

### ***Decarbonizing our non-generation operations***

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 and gas distribution.

PPL is working to make system enhancements necessary to meet electricity demand over the long term to support electrification efforts by our customers, including the adoption of electricity-fueled transportation. We are also reducing our own carbon footprint through electrification of our fleet vehicles. PPL's operating companies are electrifying their light, medium and heavy-duty fleet vehicles and employing the use of electric lifts on bucket trucks. We are assessing opportunities for efficiency and renewable self-generation to reduce energy usage at our owned buildings by approximately 30% by 2030. We also plan to install at least one solar array annually per company to help offset energy use.

In addition to electrification of our fleet vehicles, PPL has set energy use goals, including reducing energy consumption by 20-28% in our buildings by 2030 and installing one solar array per company annually to help offset energy use.

In our natural gas operations, LG&E's asset replacement and modernization program has resulted in a significant decrease in below-ground leaks by more than 70% since 2010, which has driven reductions in scope 1 emissions from gas distribution operations. To continue to serve customers who will require non-electric service in a low-carbon future, we are exploring renewable fuel options and alternative heating options.

Comprehensive, system-wide planning will remain critical to providing resilient energy to our customers at the lowest cost. We are assessing our gas LDC assets to inform future decarbonization goals and best practices across these operations, and we believe that our experience will translate into substantial benefits in Rhode Island.

### ***Driving digital innovation and R&D to enable new technologies***

PPL is actively involved in industry and public sector partnerships focused on advancing research in several key technology areas: advanced dispatchable renewables and power electronics; long-duration energy storage and advanced demand efficiency; zero-carbon fuels (e.g., hydrogen); advanced nuclear energy; and carbon capture, utilization and storage. It is through a collective commitment to research and development that PPL's operating utilities are able to improve reliability, resiliency and flexibility of the power grid while helping to usher in a new era of sustainable energy.

We're 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.

For information on key partnerships, please see page 17-19 of the

[2023 Corporate Sustainability Report.](#)

**[Positioning the grid as an enabler for clean energy resources and driving energy efficiency and demand-side management](#)**

Across PPL, we're focused on creating utilities of the future that are agile, innovative and technology-enabled to drive additional value for customers and shareowners and support a reliable, affordable clean energy transition.

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.

PPL's grid modernization projects have been selected to receive up to \$100 million in federal funding to advance grid modernization and decarbonization efforts through the Bipartisan Infrastructure Law.

PPL Electric's Grid of the Future project, which represents \$99 million in planned investments, includes a combination of hardware and software components that work seamlessly together to deliver grid flexibility to the transmission and distribution systems and provide significant customer benefits, including increased reliability and resiliency, while advancing an affordable clean energy transition.

RIE's Smart Grid for Smart Decarbonization project proposed integrating a variety of advanced technologies to improve visibility and control of the electric grid, strengthen reliability, better enable the electric grid to integrate increased renewable energy resources, and reduce infrastructure costs for customers.

**ADDITIONAL RESOURCES**

PPL provides transparent, voluntary disclosure of sustainability issues through several reporting mechanisms. We are pleased to provide investors and other interested stakeholders with our 2023 EEI-AGA report using a common set of key environmental, social and governance (ESG) metrics across the utility sector. Topics highlighted in this report are those that the industry and investors have identified to be of particular interest through our regular engagement and targeted surveys.

We will continue to consult stakeholders and monitor relevant global frameworks as we work to continually improve our reporting and disclosure.

See PPL's [sustainability disclosures website](#) for a complete listing of ESG metrics and sustainability strategy disclosures. Links to specific topics of interest can be found in the following publicly available resources:

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Climate Goals and Related Analysis

- [Climate Action](#)
- [Climate Assessment Report](#)
- [Generation Study – Addendum to 2021 Climate Assessment Report](#)
- [Sustainability disclosures including:](#)
  - [CDP climate questionnaire](#)
  - [SASB mapping](#)
  - [TCFD mapping](#)

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Diversity, Equity and Inclusion

- [DEI strategy](#)
- [2023 Corporate Sustainability Report \(pages 45-46\)](#)

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Voluntary ESG Disclosure

- [2023 Corporate Sustainability Report \(Voluntary Disclosure Index, page 66\)](#)

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Human Capital Management

- [2023 Corporate Sustainability Report \(pages 44-51-46\)](#)

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Public Policy

- [Public Policy Disclosures](#)

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Research and Development

- [2023 Corporate Sustainability Report \(page 17-19\)](#)

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*Cautionary statement regarding forward-looking information: Any statements made in this document about future operating results or other future events are forward-looking statements under the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995. Although based on current beliefs and expectations, forward-looking statements involve various risks and uncertainties, including those that PPL Corporation describes in its Form 10-K and other filings with the Securities and Exchange Commission. Actual results may differ materially from the forward-looking statements.*

# Electric Company ESG/Sustainability Quantitative Section

## PPL Corporation | Quantitative Information | Electric

<b>Parent Company:</b>	PPL Corporation
<b>Operating Company(s):</b>	PPL Electric Utilities (PPL Electric), Louisville Gas & Electric and Kentucky Utilities (LG&E and KU), and Rhode Island Energy (RIE)
<b>Business Type(s):</b>	Fully regulated utilities; T&D (Pennsylvania, Rhode Island) and T&D plus regulated generation (Kentucky)
<b>State(s) of Operation:</b>	Pennsylvania, Kentucky, Virginia and Rhode Island
<b>State(s) with RPS Programs:</b>	Pennsylvania (mandatory), Rhode Island (mandatory)
<b>Regulatory Environment:</b>	Regulated
<b>Report Date:</b>	8/31/2024

PORTFOLIO			
Ref. No.		Last Year - 2022	Current Year - 2023
<b>1</b>	<b>Owned Nameplate Generation Capacity at end of year (MW)</b>	<b>7,535</b>	<b>7,535</b>
1.1	Coal	4,715	4,715
1.2	Natural Gas	2,716	2,716
1.3	Nuclear		
1.4	Petroleum		
1.5	Total Renewable Energy Resources	104	104
1.5.1	Biomass/Biogas		
1.5.2	Geothermal		
1.5.3	Hydroelectric	96	96
1.5.4	Solar	8	8
1.5.5	Wind		
1.6	Other		

<b>2</b>	<b>Net Generation for the data year (MWh)</b>	<b>31,865,850</b>	<b>30,089,360</b>
2.1	Coal	24,648,191	24,394,774
2.2	Natural Gas	6,855,809	5,361,936
2.3	Nuclear		
2.4	Petroleum	6,398	228
2.5	Total Renewable Energy Resources	355,452	332,422
2.5.1	Biomass/Biogas		
2.5.2	Geothermal		
2.5.3	Hydroelectric	338,410	316,011
2.5.4	Solar	17,042 <sup>1</sup>	16,411
2.5.5	Wind		
2.6	Other		

<b>2.i</b>	<b>Owned Net Generation for the data year (MWh)</b>	<b>31,585,910</b>	<b>29,422,636</b>
2.1.i	Coal	24,368,251	23,728,050
2.2.i	Natural Gas	6,855,809	5,361,936
2.3.i	Nuclear		
2.4.i	Petroleum	6,398	228
2.5.i	Total Renewable Energy Resources	355,452	332,422
2.5.1.i	Biomass/Biogas		
2.5.2.i	Geothermal		
2.5.3.i	Hydroelectric	338,410	316,011
2.5.4.i	Solar	17,042 <sup>1</sup>	16,411
2.5.5.i	Wind		
2.6.i	Other		

<sup>1</sup> Safari Energy LLC, which was sold in September 2022, is not included in this report.

Ref. No.	PPL Corporation	Last Year - 2022	Current Year - 2023
<b>2.ii</b>	<b>Purchased Net Generation for the data year (MWh)</b>		
2.1.ii	Coal	279,940	666,724
2.2.ii	Natural Gas		
2.3.ii	Nuclear		
2.4.ii	Petroleum		
2.5.ii	Total Renewable Energy Resources		
2.5.1.ii	Biomass/Biogas		
2.5.2.ii	Geothermal		
2.5.3.ii	Hydroelectric		
2.5.4.ii	Solar		
2.5.5.ii	Wind		
2.6.ii	Other		

<b>3</b>	<b>Capital Expenditures and Energy Efficiency (EE)</b>		
3.1	Total Annual Capital Expenditures (nominal dollars)	\$2,158,000,000 <sup>2,3</sup>	\$2,390,000,000 <sup>3</sup>
3.2	Incremental Annual Electricity Savings from EE Measures (MWh)	439,055 <sup>2</sup>	367,908
3.3	Incremental Annual Investment in Electric EE Programs (nominal dollars)	\$108,943,441 <sup>2</sup>	\$185,979,276

<b>4</b>	<b>Retail Electric Customer Count (at end of year)</b>	<b>2,985,975</b>	<b>3,006,113</b>
4.1	Commercial	399,333	402,986
4.2	Industrial	7,120	6,915
4.3	Residential	2,579,522	2,596,212

## EMISSIONS

Ref. No.	PPL Corporation	Last Year - 2022	Current Year - 2023
<b>5</b>	<b>GHG Emissions: Carbon Dioxide (CO<sub>2</sub>) and Carbon Dioxide Equivalent (CO<sub>2</sub>e)</b>		
<b>5.1</b>	<b>Owned Generation</b>		
5.1.1	Carbon Dioxide (CO <sub>2</sub> )		
5.1.1.1	Total Owned Generation CO <sub>2</sub> Emissions (MT)		
5.1.1.2	Total Owned Generation CO <sub>2</sub> Emissions Intensity (MT/Net MWh)		
5.1.2	Carbon Dioxide Equivalent (CO <sub>2</sub> e)		
5.1.2.1	Total Owned Generation CO <sub>2</sub> e Emissions (MT)	26,885,354	25,088,137
5.1.2.2	Total Owned Generation CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.851	0.853
<b>5.2</b>	<b>Purchased Power</b>		
5.2.1	Carbon Dioxide (CO <sub>2</sub> )		
5.2.1.1	Total Purchased Generation CO <sub>2</sub> Emissions (MT)		
5.2.1.2	Total Purchased Generation CO <sub>2</sub> Emissions Intensity (MT/Net MWh)		
5.2.2	Carbon Dioxide Equivalent (CO <sub>2</sub> e)		
5.2.2.1	Total Purchased Generation CO <sub>2</sub> e Emissions (MT)	6,901,883	5,560,783
5.2.2.2	Total Purchased Generation CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.37	0.37

<sup>2</sup> RIE partial year CY22 data

<sup>3</sup> Includes 'Corporate and Other' expenditures for long-lived assets



Ref. No.	PPL Corporation	Last Year - 2022	Current Year - 2023
<b>5.3</b>	<b>Owned Generation + Purchased Power</b>		
5.3.1	Carbon Dioxide (CO <sub>2</sub> )		
5.3.1.1	Total Owned + Purchased Generation CO <sub>2</sub> Emissions (MT)		
5.3.1.2	Total Owned + Purchased Generation CO <sub>2</sub> Emissions Intensity (MT/Net MWh)		
5.3.2	Carbon Dioxide Equivalent (CO <sub>2</sub> e)		
5.3.2.1	Total Owned + Purchased Generation CO <sub>2</sub> e Emissions (MT)	33,787,237	30,648,920
5.3.2.2	Total Owned + Purchased Generation CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.673	0.691
<b>5.4</b>	<b>Non-Generation CO<sub>2</sub>e Emissions of Sulfur Hexafluoride (SF<sub>6</sub>)</b>		
5.4.1	Total CO <sub>2</sub> e emissions of SF <sub>6</sub> (MT)	13,126	12,324
5.4.2	Leak rate of CO <sub>2</sub> e emissions of SF <sub>6</sub>	0.00026	0.00028

<b>6</b>	<b>Nitrogen Oxide (NOx), Sulfur Dioxide (SO<sub>2</sub>), Mercury (Hg)</b>		
6.1	Generation basis for calculation		
<b>6.2</b>	<b>Nitrogen Oxide (NOx)</b>		
6.2.1	Total NOx Emissions (MT)	12,652	12,940
6.2.2	Total NOx Emissions Intensity (MT/Net MWh)	0.0004	0.0004
<b>6.3</b>	<b>Sulfur Dioxide (SO<sub>2</sub>)</b>		
6.3.1	Total SO <sub>2</sub> Emissions (MT)	15,293	12,087
6.3.2	Total SO <sub>2</sub> Emissions Intensity (MT/Net MWh)	0.00048	0.00041
<b>6.4</b>	<b>Mercury (Hg)</b>		
6.4.1	Total Hg Emissions (kg)	55.0	41.0
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	1.74E-06	1.39E-06

## RESOURCES

<b>7</b>	<b>Human Resources</b>		
7.1	Total Number of Employees	6,527	6,629
7.2	Percentage of Women in Total Workforce	26%	26%
7.3	Percentage of Minorities in Total Workforce	12%	13%
7.4	Total Number on Board of Directors/Trustees	10	10
7.5	Percentage of Women on Board of Directors/Trustees	40%	40%
7.6	Percentage of Minorities on Board of Directors/Trustees	30%	30%
7.7	Employee Safety Metrics		
7.7.1	Recordable Incident Rate	1.31	1.33
7.7.2	Lost-time Case Rate	0.32	0.38
7.7.3	Days Away, Restricted, and Transfer (DART) Rate	0.73	0.75
7.7.4	Work-related Fatalities	0	0

<b>8</b>	<b>Fresh Water Resources used in Thermal Power Generation Activities</b>		
8.1	Water Withdrawals - Consumptive (Millions of Gallons)	15,252	8,012
8.2	Water Withdrawals - Non-Consumptive (Millions of Gallons)	90,207	92,221
8.3	Water Withdrawals - Consumptive Rate (Millions of Gallons/Net MWh)	0.00048	0.00027
8.4	Water Withdrawals - Non-Consumptive Rate (Millions of Gallons/Net MWh)	0.00283	0.00306

<b>9</b>	<b>Waste Products</b>		
9.1	Amount of Hazardous Waste Manifested for Disposal	78.31	217.15
9.2	Percent of Coal Combustion Products Beneficially Used <sup>7</sup>	72.3% <sup>4</sup>	71.9% <sup>4</sup>

<sup>4</sup> LG&E and KU only. PPL EU and RIE do not produce coal combustion products.

## PPL Electric Utilities | Quantitative Information | Electric

<b>Parent Company:</b>	PPL Corporation
<b>Operating Company(s):</b>	PPL Electric Utilities (PPL Electric)
<b>Business Type(s):</b>	Fully regulated utilities; T&D (Pennsylvania)
<b>State(s) of Operation:</b>	Pennsylvania
<b>State(s) with RPS Programs:</b>	Pennsylvania (mandatory)
<b>Regulatory Environment:</b>	Regulated
<b>Report Date:</b>	8/31/2024

PORTFOLIO			
Ref. No.		Last Year - 2022	Current Year - 2023
<b>3</b>	<b>Capital Expenditures and Energy Efficiency (EE)</b>		
3.1	Total Annual Capital Expenditures (nominal dollars)	\$889,000,000	\$956,000,000
3.2	Incremental Annual Electricity Savings from EE Measures (MWh)	290,291	203,117
3.3	Incremental Annual Investment in Electric EE Programs (nominal dollars)	\$46,652,745	\$49,660,393

<b>4</b>	<b>Retail Electric Customer Count (at end of year)</b>	<b>1,473,075</b>	<b>1,480,814</b>
4.1	Commercial	186,103	187,947
4.2	Industrial	3,133	3,023
4.3	Residential	1,283,839	1,289,844

EMISSIONS			
Ref. No.		Last Year - 2022	Current Year - 2023
<b>5</b>	<b>GHG Emissions: Carbon Dioxide (CO<sub>2</sub>) and Carbon Dioxide Equivalent (CO<sub>2</sub>e)</b>		
<b>5.2</b>	<b>Purchased Power</b>		
5.2.1	Carbon Dioxide (CO <sub>2</sub> )		
5.2.1.1	Total Purchased Generation CO <sub>2</sub> Emissions (MT)		
5.2.1.2	Total Purchased Generation CO <sub>2</sub> Emissions Intensity (MT/Net MWh)		
5.2.2	Carbon Dioxide Equivalent (CO <sub>2</sub> e)		
5.2.2.1	Total Purchased Generation CO <sub>2</sub> e Emissions (MT)	5,364,971	3,930,963
5.2.2.2	Total Purchased Generation CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.382	0.368

Ref. No.	PPL Electric Utilities	Last Year - 2021	Current Year - 2022
<b>5.4</b>	<b>Non-Generation CO<sub>2</sub>e Emissions of Sulfur Hexafluoride (SF<sub>6</sub>)</b>		
5.4.1	Total CO <sub>2</sub> e emissions of SF <sub>6</sub> (MT)	6,754	6,278
5.4.2	Leak rate of CO <sub>2</sub> e emissions of SF <sub>6</sub>	0.00048	0.00059

RESOURCES			
<b>7</b>	<b>Human Resources</b>		
7.7	Employee Safety Metrics		
7.7.1	Recordable Incident Rate	0.90	1.10
7.7.2	Lost-time Case Rate	0.24	0.32
7.7.3	Days Away, Restricted, and Transfer (DART) Rate	0.54	0.49
7.7.4	Work-related Fatalities	0	0
<b>9</b>	<b>Waste Products</b>		
9.1	Amount of Hazardous Waste Manifested for Disposal	1.15	2.77
9.2	Percent of Coal Combustion Products Beneficially Used		

## Louisville Gas & Electric and Kentucky Utilities | Quantitative Information | Electric

**Parent Company:** PPL Corporation  
**Operating Company(s):** Louisville Gas & Electric and Kentucky Utilities (LG&E and KU)  
**Business Type(s):** Fully regulated utilities; T&D plus regulated generation (Kentucky)  
**State(s) of Operation:** Kentucky and Virginia  
**Regulatory Environment:** Regulated  
**Report Date:** 8/31/2024

PORTFOLIO			
Ref. No.		Last Year - 2022	Current Year - 2023
<b>1</b>	<b>Owned Nameplate Generation Capacity at end of year (MW)</b>		
1.1	Coal	7,535	7,535
1.2	Natural Gas	4,715	4,715
1.3	Nuclear	2,716	2,716
1.4	Petroleum		
1.5	Total Renewable Energy Resources		
1.5.1	Biomass/Biogas	104	104
1.5.2	Geothermal		
1.5.3	Hydroelectric		
1.5.4	Solar	96	96
1.5.5	Wind	8	8
1.6	Other		
<b>2</b>	<b>Net Generation for the data year (MWh)</b>		
2.1	Coal	31,865,850	30,089,360
2.2	Natural Gas	24,648,191	24,394,774
2.3	Nuclear	6,855,809	5,361,936
2.4	Petroleum		
2.5	Total Renewable Energy Resources	6,398	228
2.5.1	Biomass/Biogas	355,452	332,422
2.5.2	Geothermal		
2.5.3	Hydroelectric		
2.5.4	Solar	338,410 <sup>1</sup>	316,011
2.5.5	Wind	17,042	16,411
2.6	Other		

Ref. No.	Louisville Gas & Electric and Kentucky Utilities (LG&E and KU)	Last Year - 2022	Current Year - 2023
<b>2.i</b>	<b>Owned Net Generation for the data year (MWh)</b>	<b>31,585,910</b>	<b>29,422,636</b>
2.1.i	Coal	24,368,251	23,728,050
2.2.i	Natural Gas	6,855,809	5,361,936
2.3.i	Nuclear		
2.4.i	Petroleum	6,398	228
2.5.i	Total Renewable Energy Resources	355,452	332,422
2.5.1.i	Biomass/Biogas		
2.5.2.i	Geothermal		
2.5.3.i	Hydroelectric	338,410	316,011
2.5.4.i	Solar	17,042 <sup>1</sup>	16,411
2.5.5.i	Wind		
2.6.i	Other		

<b>2.ii</b>	<b>Purchased Net Generation for the data year (MWh)</b>		
2.1.ii	Coal	279,940	666,724
2.2.ii	Natural Gas		
2.3.ii	Nuclear		
2.4.ii	Petroleum		
2.5.ii	Total Renewable Energy Resources		
2.5.1.ii	Biomass/Biogas		
2.5.2.ii	Geothermal		
2.5.3.ii	Hydroelectric		
2.5.4.ii	Solar		
2.5.5.ii	Wind		
2.6.ii	Other		

<b>3</b>	<b>Capital Expenditures and Energy Efficiency (EE)</b>		
3.1	Total Annual Capital Expenditures (nominal dollars)	\$917,000,000	\$950,000,000
3.2	Incremental Annual Electricity Savings from EE Measures (MWh)	57,353	59,164
3.3	Incremental Annual Investment in Electric EE Programs (nominal dollars)	\$13,412,676	\$15,051,778

<b>4</b>	<b>Retail Electric Customer Count (at end of year)</b>	<b>1,001,536</b>	<b>1,008,503</b>
4.1	Commercial	150,359	150,839
4.2	Industrial	2,279	2,252
4.3	Residential	848,898	855,412



EMISSIONS			
Ref. No.	Louisville Gas & Electric and Kentucky Utilities (LG&E and KU)	Last Year - 2022	Current Year - 2023
<b>5</b>	<b>GHG Emissions: Carbon Dioxide (CO<sub>2</sub>) and Carbon Dioxide Equivalent (CO<sub>2</sub>e)</b>		
<b>5.1</b>	<b>Owned Generation</b>		
5.1.1	Carbon Dioxide (CO <sub>2</sub> )		
5.1.1.1	Total Owned Generation CO <sub>2</sub> Emissions (MT)		
5.1.1.2	Total Owned Generation CO <sub>2</sub> Emissions Intensity (MT/Net MWh)		
5.1.2	Carbon Dioxide Equivalent (CO <sub>2</sub> e)		
5.1.2.1	Total Owned Generation CO <sub>2</sub> e Emissions (MT)	26,885,354	25,088,137
5.1.2.2	Total Owned Generation CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.851	0.853
<b>5.2</b>	<b>Purchased Power</b>		
5.2.1	Carbon Dioxide (CO <sub>2</sub> )		
5.2.1.1	Total Purchased Generation CO <sub>2</sub> Emissions (MT)		
5.2.1.2	Total Purchased Generation CO <sub>2</sub> Emissions Intensity (MT/Net MWh)		
5.2.2	Carbon Dioxide Equivalent (CO <sub>2</sub> e)		
5.2.2.1	Total Purchased Generation CO <sub>2</sub> e Emissions (MT)	246,078	592,165
5.2.2.2	Total Purchased Generation CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.879	0.888

<b>5.3</b>	<b>Owned Generation + Purchased Power</b>		
5.3.1	Carbon Dioxide (CO <sub>2</sub> )		
5.3.1.1	Total Owned + Purchased Generation CO <sub>2</sub> Emissions (MT)		
5.3.1.2	Total Owned + Purchased Generation CO <sub>2</sub> Emissions Intensity (MT/Net MWh)		
5.3.2	Carbon Dioxide Equivalent (CO <sub>2</sub> e)		
5.3.2.1	Total Owned + Purchased Generation CO <sub>2</sub> e Emissions (MT)	27,131,432	25,680,302
5.3.2.2	Total Owned + Purchased Generation CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.851	0.853
<b>5.4</b>	<b>Non-Generation CO<sub>2</sub>e Emissions of Sulfur Hexafluoride (SF<sub>6</sub>)</b>		
5.4.1	Total CO <sub>2</sub> e emissions of SF <sub>6</sub> (MT)	4,382	4,358
5.4.2	Leak rate of CO <sub>2</sub> e emissions of SF <sub>6</sub>	0.00014	0.00014

<b>6</b>	<b>Nitrogen Oxide (NOx), Sulfur Dioxide (SO<sub>2</sub>), Mercury (Hg)</b>		
6.1	Generation basis for calculation		
<b>6.2</b>	<b>Nitrogen Oxide (NOx)</b>		
6.2.1	Total NOx Emissions (MT)	12,652	12,940
6.2.2	Total NOx Emissions Intensity (MT/Net MWh)	0.0004	0.0004
<b>6.3</b>	<b>Sulfur Dioxide (SO<sub>2</sub>)</b>		
6.3.1	Total SO <sub>2</sub> Emissions (MT)	15,293	12,087
6.3.2	Total SO <sub>2</sub> Emissions Intensity (MT/Net MWh)	0.00048	0.00041
<b>6.4</b>	<b>Mercury (Hg)</b>		
6.4.1	Total Hg Emissions (kg)	55	41
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	1.74E-06	1.39E-06

RESOURCES			
Ref. No.	Louisville Gas & Electric and Kentucky Utilities (LG&E and KU)	Last Year - 2022	Current Year - 2023
<b>7</b>	<b>Human Resources</b>		
7.7	Employee Safety Metrics		
7.7.1	Recordable Incident Rate	1.09	1.02
7.7.2	Lost-time Case Rate	0.19	0.28
7.7.3	Days Away, Restricted, and Transfer (DART) Rate	0.32	0.46
7.7.4	Work-related Fatalities	0	0
<b>8</b>	<b>Fresh Water Resources used in Thermal Power Generation Activities</b>		
8.1	Water Withdrawals - Consumptive (Millions of Gallons)	15,252	8,012
8.2	Water Withdrawals - Non-Consumptive (Millions of Gallons)	90,207	92,221
8.3	Water Withdrawals - Consumptive Rate (Millions of Gallons/Net MWh)	0.00048	0.00027
8.4	Water Withdrawals - Non-Consumptive Rate (Millions of Gallons/Net MWh)	0.00283	0.00306
<b>9</b>	<b>Waste Products</b>		
9.1	Amount of Hazardous Waste Manifested for Disposal	3.60	4.35
9.2	Percent of Coal Combustion Products Beneficially Used	72.3%	71.9%

## Rhode Island Energy | Quantitative Information | Electric

<b>Parent Company:</b>	PPL Corporation
<b>Operating Company(s):</b>	Rhode Island Energy (RIE)
<b>Business Type(s):</b>	Fully regulated utilities; T&D
<b>State(s) of Operation:</b>	Rhode Island
<b>State(s) with RPS Programs:</b>	Rhode Island (mandatory)
<b>Regulatory Environment:</b>	Regulated
<b>Report Date:</b>	8/31/2024

PORTFOLIO			
Ref. No.		Last Year - 2022	Current Year - 2023
<b>3</b>	<b>Capital Expenditures and Energy Efficiency (EE)</b>		
3.1	Total Annual Capital Expenditures (nominal dollars)	\$268,000,000 <sup>2</sup>	\$454,000,000
3.2	Incremental Annual Electricity Savings from EE Measures (MWh)	91,411 <sup>2</sup>	105,627
3.3	Incremental Annual Investment in Electric EE Programs (nominal dollars)	\$48,878,020 <sup>2</sup>	\$121,267,105

<b>4</b>	<b>Retail Electric Customer Count (at end of year)</b>	<b>511,364</b>	<b>516,796</b>
4.1	Commercial	62,871	64,200
4.2	Industrial	1,708	1,640
4.3	Residential	446,785	450,956

EMISSIONS			
Ref. No.		Last Year - 2022	Current Year - 2023
<b>5.2</b>	<b>Purchased Power</b>		
5.2.1	Carbon Dioxide (CO <sub>2</sub> )		
5.2.1.1	Total Purchased Generation CO <sub>2</sub> Emissions (MT)		
5.2.1.2	Total Purchased Generation CO <sub>2</sub> Emissions Intensity (MT/Net MWh)		
5.2.2	Carbon Dioxide Equivalent (CO <sub>2</sub> e)		
5.2.2.1	Total Purchased Generation CO <sub>2</sub> e Emissions (MT)	1,290,834	1,037,655
5.2.2.2	Total Purchased Generation CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)	0.298	0.292

Ref. No.	Rhode Island Energy	Last Year - 2022	Current Year - 2023
<b>5.3</b>	<b>Owned Generation + Purchased Power</b>		
5.3.1	Carbon Dioxide (CO <sub>2</sub> )		
5.3.1.1	Total Owned + Purchased Generation CO <sub>2</sub> Emissions (MT)		
5.3.1.2	Total Owned + Purchased Generation CO <sub>2</sub> Emissions Intensity (MT/Net MWh)		
5.3.2	Carbon Dioxide Equivalent (CO <sub>2</sub> e)		
5.3.2.1	Total Owned + Purchased Generation CO <sub>2</sub> e Emissions (MT)		
5.3.2.2	Total Owned + Purchased Generation CO <sub>2</sub> e Emissions Intensity (MT/Net MWh)		
<b>5.4</b>	<b>Non-Generation CO<sub>2</sub>e Emissions of Sulfur Hexafluoride (SF<sub>6</sub>)</b>		
5.4.1	Total CO <sub>2</sub> e emissions of SF <sub>6</sub> (MT)	1,990	1,688
5.4.2	Leak rate of CO <sub>2</sub> e emissions of SF <sub>6</sub>	0.00046	0.00047

RESOURCES			
7	Human Resources		
7.7	Employee Safety Metrics		
7.7.1	Recordable Incident Rate	2.52	2.56
7.7.2	Lost-time Case Rate	0.81	0.74
7.7.3	Days Away, Restricted, and Transfer (DART) Rate	2.16	1.98
7.7.4	Work-related Fatalities	0	0

<b>9</b>	<b>Waste Products</b>		
9.1	Amount of Hazardous Waste Manifested for Disposal	73.56	210.03
9.2	Percent of Coal Combustion Products Beneficially Used		

# Emissions reduction goal

Goal Applicability	Baseline Year	Target Year	Reduction Goal Description (Short)	Source (URL)
LGE, KU, PPL Electric, RIE	2010	2035	PPL has set an interim goal of CO <sub>2</sub> e reductions of 70% from 2010 levels by 2035.	<a href="https://www.pplweb.com/sustainability/climate-action/">https://www.pplweb.com/sustainability/climate-action/</a>
LGE, KU, PPL Electric, RIE	2010	2040	PPL has set an interim goal of CO <sub>2</sub> e reductions of 80% from 2010 levels by 2040.	<a href="https://www.pplweb.com/sustainability/climate-action/">https://www.pplweb.com/sustainability/climate-action/</a>
LGE, KU, PPL Electric, RIE	2010	2050	PPL set a goal of achieving net zero CO <sub>2</sub> e emissions by 2050. Goal-related emissions include those from owned generation, LG&E and KU purchased power, fleet vehicles, fugitive emissions (SF6) and company facility energy use.	<a href="https://www.pplweb.com/sustainability/climate-action/">https://www.pplweb.com/sustainability/climate-action/</a>
LGE, KU, PPL Electric, RIE	2019	2030	PPL established new fleet vehicle goals in 2021, which 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).	<a href="https://www.pplweb.com/sustainability/climate-action/">https://www.pplweb.com/sustainability/climate-action/</a>
LGE, KU, PPL Electric, RIE	2019	2030	PPL established a new building energy use reduction goal in 2021 to decrease energy use in buildings by 28% from 2019 levels by 2030	<a href="https://www.pplweb.com/sustainability/climate-action/">https://www.pplweb.com/sustainability/climate-action/</a>

- Notes
1. Additional information on the emissions goals listed above, including how they will be achieved, can be found in the Qualitative section.
  2. Information on the type of emissions (e.g., carbon, methane, CO<sub>2</sub>e, etc.) and which scope(s) of emissions apply – based on the WRI GHG Reporting Protocol, TCR Reporting Protocol(s), or other acceptable reporting procedures – should be included in the goal description. Emissions reported in the Quantitative section are not based on a Scope 1, 2 or 3 methodology.
  3. Goal Applicability refers to the entity to which the goal applies (e.g., parent company, operating company, eclectic or gas utility, etc.).

# Gas Company ESG/Sustainability Quantitative Section

## PPL Corporation | Quantitative Information | Gas

<b>Parent Company:</b>	PPL Corporation
<b>Operating Company(s):</b>	Louisville Gas & Electric (LG&E), and Rhode Island Energy (RIE)
<b>Business Type(s):</b>	Fully regulated utilities
<b>State(s) of Operation:</b>	Kentucky and Rhode Island
<b>Regulatory Environment:</b>	Regulated
<b>Report Date:</b>	8/31/2024

NATURAL GAS DISTRIBUTION			
Ref. No.		Last Year - 2022	Current Year - 2023
<b>1</b>	<b>Methane Emissions and Mitigation from Distribution Mains</b>		
1.1	Number of Gas Distribution Customers	607,437	612,731
1.2	Distribution Mains in Service		
1.2.1	Plastic (miles)	4,005.34	4,052.55
1.2.2	Cathodically Protected Steel - Bare & Coated (miles)	2,775.33	2,776.42
1.2.3	Unprotected Steel - Bare & Coated (miles)	275.92	263.86
1.2.4	Cast Iron / Wrought Iron - without upgrades (miles)	590.12	560.79
1.3	Plan/Commitment to Replace / Upgrade Remaining Miles of Distribution Mains (# years to complete)		
1.3.1	Unprotected Steel (Bare & Coated) (# years to complete)		
1.3.2	Cast Iron / Wrought Iron (# years to complete)		

<b>2</b>	<b>Distribution CO<sub>2</sub>e Fugitive Emissions</b>	<b>2022</b>	<b>2023</b>
2.1	CO <sub>2</sub> e Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	148,424.25	143,206.5
2.2	CH <sub>4</sub> Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	5,936.97	5,728.26
2.2.1	CH <sub>4</sub> Fugitive Methane Emissions from Gas Distribution Operations (MMSCF/year)	309.22	298.35
2.3	Annual Natural Gas Throughput from Gas Distribution Operations in thousands of standard cubic feet (Mscf/year)	84,451,089	77,178,019
2.3.1	Annual Methane Gas Throughput from Gas Distribution Operations in millions of standard cubic feet (MMscf/year)	80,228.53	73,319.12
2.4	Fugitive Methane Emissions Rate (Percent MMscf of Methane Emissions per MMscf of Methane Throughput)	0.39%	0.41%

NATURAL GAS GATHERING AND BOOSTING			
<b>1</b>	<b>Methane Emissions</b>	<b>2022</b>	<b>2023</b>
1.1	Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions		
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility (miles)		
1.1.2	Volume of Gathering Pipeline Blow Down Emissions (scf)		
1.1.4	Gathering Pipeline Blow-Down Emissions outside storage and compression facilities (metric tons CO <sub>2</sub> e)		

<b>2</b>	<b>CO<sub>2</sub>e Combustion Emissions for Gathering &amp; Boosting Compression</b>		
2.1	CO <sub>2</sub> e Emissions for Gathering & Boosting Compression Stations (metric tons)		

<b>3</b>	<b>Conventional Combustion Emissions from Gathering &amp; Boosting Compression</b>		
3.1	Emissions reported for all permitted sources (minor or major)		
3.1.1	NOx (metric tons per year)	0.87	0.53
3.1.2	VOC (metric tons per year)	4.16	4.35



## Louisville Gas & Electric | Quantitative Information | Gas

**Parent Company:** PPL Corporation  
**Operating Company(s):** Louisville Gas & Electric  
**Business Type(s):** Fully regulated utilities  
**State(s) of Operation:** Kentucky  
**Regulatory Environment:** Regulated  
**Report Date:** 8/31/2024

### NATURAL GAS DISTRIBUTION

Ref. No.		Last Year - 2022	Current Year - 2023
<b>1</b>	<b>Methane Emissions and Mitigation from Distribution Mains</b>		
1.1	Number of Gas Distribution Customers	333,941	335,113
1.2	Distribution Mains in Service		
1.2.1	Plastic (miles)	2,246.2	2,255.1
1.2.2	Cathodically Protected Steel - Bare & Coated (miles)	2,192.87	2,191.7
1.2.3	Unprotected Steel - Bare & Coated (miles)	-	0.1
1.2.4	Cast Iron / Wrought Iron - without upgrades (miles)	-	0
1.3	Plan/Commitment to Replace / Upgrade Remaining Miles of Distribution Mains (# years to complete)		
1.3.1	Unprotected Steel (Bare & Coated) (# years to complete)		
1.3.2	Cast Iron / Wrought Iron (# years to complete)		

<b>2</b>	<b>Distribution CO<sub>2</sub>e Fugitive Emissions</b>	<b>2022</b>	<b>2023</b>
2.1	CO <sub>2</sub> e Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	22,031	21,992
2.2	CH <sub>4</sub> Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	881.24	879.68
2.2.1	CH <sub>4</sub> Fugitive Methane Emissions from Gas Distribution Operations (MMSCF/year)	45.90	45.82
2.3	Annual Natural Gas Throughput from Gas Distribution Operations in thousands of standard cubic feet (Mscf/year)	46,730,596	41,270,827
2.3.1	Annual Methane Gas Throughput from Gas Distribution Operations in millions of standard cubic feet (MMscf/year)	44,394.07	39,207.29
2.4	Fugitive Methane Emissions Rate (Percent MMscf of Methane Emissions per MMscf of Methane Throughput)	0.10%	0.12%

### NATURAL GAS GATHERING AND BOOSTING

Ref. No.	Louisville Gas & Electric	2022	2023
<b>1</b>	<b>Methane Emissions</b>		
1.1	Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions		
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility (miles)		
1.1.2	Volume of Gathering Pipeline Blow Down Emissions (scf)		
1.1.4	Gathering Pipeline Blow-Down Emissions outside storage and compression facilities (metric tons CO <sub>2</sub> e)		

<b>2</b>	<b>CO<sub>2</sub>e Combustion Emissions for Gathering &amp; Boosting Compression</b>		
2.1	CO <sub>2</sub> e Emissions for Gathering & Boosting Compression Stations (metric tons)		

<b>3</b>	<b>Conventional Combustion Emissions from Gathering &amp; Boosting Compression</b>		
3.1	Emissions reported for all permitted sources (minor or major)		
3.1.1	NOx (metric tons per year)	0.87	0.53
3.1.2	VOC (metric tons per year)	4.16	4.35

## Rhode Island Energy | Quantitative Information | Gas

**Parent Company:** PPL Corporation  
**Operating Company(s):** Rhode Island Energy (RIE)  
**Business Type(s):** Fully regulated utility  
**State(s) of Operation:** Rhode Island  
**Regulatory Environment:** Regulated  
**Report Date:** 8/31/2024

### NATURAL GAS DISTRIBUTION

Ref. No.		Last Year - 2022	Current Year - 2023
<b>1</b>	<b>Methane Emissions and Mitigation from Distribution Mains</b>		
1.1	Number of Gas Distribution Customers	273,496	277,618
1.2	Distribution Mains in Service		
1.2.1	Plastic (miles)	1,759.14	1,797.45
1.2.2	Cathodically Protected Steel - Bare & Coated (miles)	582.46	584.72
1.2.3	Unprotected Steel - Bare & Coated (miles)	275.92	263.76
1.2.4	Cast Iron / Wrought Iron - without upgrades (miles)	590.12	560.79
1.3	Plan/Commitment to Replace / Upgrade Remaining Miles of Distribution Mains (# years to complete)		
1.3.1	Unprotected Steel (Bare & Coated) (# years to complete)		
1.3.2	Cast Iron / Wrought Iron (# years to complete)		

<b>2</b>	<b>Distribution CO<sub>2</sub>e Fugitive Emissions</b>	<b>2022</b>	<b>2023</b>
2.1	CO <sub>2</sub> e Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	126,393.25	121,214.50
2.2	CH <sub>4</sub> Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	5,055.73	4,848.58
2.2.1	CH <sub>4</sub> Fugitive Methane Emissions from Gas Distribution Operations (MMSCF/year)	263.32	252.53
2.3	Annual Natural Gas Throughput from Gas Distribution Operations in thousands of standard cubic feet (Mscf/year)	37,720,493	35,907,192
2.3.1	Annual Methane Gas Throughput from Gas Distribution Operations in millions of standard cubic feet (MMscf/year)	35,834.47	34,111.83
2.4	Fugitive Methane Emissions Rate (Percent MMscf of Methane Emissions per MMscf of Methane Throughput)	0.73%	0.74%