



ENERGY FORWARD

PPL CORPORATION 2021 EEI-AGA ESG/SUSTAINABILITY REPORT



Qualitative Section

PPL Corporation (PPL), headquartered in Allentown, Pennsylvania, is the parent company to four regulated utility companies – Kentucky Utilities (KU), Louisville Gas and Electric (LG&E), PPL Electric Utilities (PPL Electric) 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. In addition, PPL is the parent company to Safari Energy, LLC, a leading provider of solar power solutions for commercial customers in the U.S.

The qualitative and quantitative data in this report primarily reflects the 2021 calendar year, with relevant 2022 data noted where applicable. Because the transaction to acquire RIE was not completed until May 2022, this report does not include data from RIE. PPL sold its U.K. utility business, Western Power Distribution (WPD) in June 2021, so this report does not include 2021 WPD data.

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 as having responsibility for overseeing PPL's practices and positions to further environmental, social and governance (ESG) performance and sustainability. The committee receives updates, including information on 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, commitments and priorities. The Corporate Leadership Council includes PPL's chief executive officer, chief operating officer, chief financial officer, chief legal officer and the chief human resources officer. Business segment presidents also provide input into sustainability strategy and key disclosures.</p>
<p>Corporate Sustainability Committee</p>	<p>Reviews and guides the development of a sustainability strategy, provides oversight of, and establishes the priorities and performance metrics for implementing the strategy. This committee is chaired by the vice president-public affairs and chief sustainability officer with 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>Conducts analyses of sustainability priority issues and ESG trends and is responsible for developing ESG disclosures. This cross-functional and enterprise-wide team of subject-matter experts is chaired by the senior manager-corporate responsibility and sustainability with members from legal, supply chain, safety, human resources, environmental, government relations, regulatory, financial, communications and community relations.</p>

Enterprise risk management

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

Managing and adapting to climate-related risks and opportunities

As part of the ERM process, representatives from PPL's business lines and corporate support groups identify, assess, prioritize, monitor and report on both ongoing and emerging risks. In addition to assessing risks through our ERM processes, PPL's operating companies assess and manage risks through the ongoing business planning process.

Across our enterprise, PPL's operating companies conduct energy system 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 system planning focuses on strengthening grid resilience, adaptation and hardening to address both physical and transition risks. This includes investments to reduce damage and speed recovery from more frequent severe weather impacts associated with climate change. PPL recently joined the Electric Power Research Institute's Climate READi initiative, a multi-year initiative focused on advanced physical risk assessment, resilience and adaptation in response to more frequent and severe weather events.

PPL's strategy also incorporates smart grid technology on the transmission and distribution grid to reliably and efficiently integrate distributed energy resources, including renewable generation and energy storage.

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.

Cybersecurity

PPL takes an enterprise-wide, risk-based approach to cybersecurity to address and mitigate today's security threats

PPL continually invests in security strategies and practices from industry accepted security control frameworks. Our cybersecurity strategy is aligned with and informed by the following:

- Current and emerging cybersecurity threats.
- Industry best practices, control frameworks and industry standards.
- Emerging security technologies and capabilities.
- National Institute of Standards and Technology (NIST) Cybersecurity Framework.
- North American Electric Reliability Corporation Critical Infrastructure Protection standards.
- Transportation Security Administration Security Directives
- Government and law enforcement security intelligence sharing.
- Industry collaboration and information sharing.

The company's chief information security officer (CISO), who reports directly to the chief operating officer, leads a dedicated cybersecurity team and is responsible for design, implementation, and execution of cyber-risk management strategy. The CISO provides periodic reports to the board, no less than twice a year, regarding the company's cybersecurity risk exposures and mitigation strategies.

The PPL Corporate Security Council oversees and governs actions to ensure that PPL is effectively managing cybersecurity risks by conducting regular reviews of the overall enterprise cybersecurity strategy, program, risks, and security posture. Chaired by the CISO, the council includes senior leaders throughout the company including PPL's chief operating officer, chief financial officer, chief human resources officer, chief legal officer, vice president-corporate audit, global chief compliance officer, operating company presidents, chief information and digital officer, and vice president-cybersecurity

Cybersecurity preparedness is addressed at multiple levels of the company. PPL conducts cybersecurity training annually for all employees and workforce phishing drills several times a year that include supplemental training when appropriate. PPL also conducts cybersecurity drills at least once per year as part of crisis response planning. Operations, IT, and cyber teams participate in industry-wide, multi-day exercises biennially. Leading third parties periodically assess the maturity of our security practices using the NIST Cybersecurity Framework.

For more details about how PPL ensures the physical and cyber security of the grid, please see page 15 of the [2021 Corporate Sustainability Report](#).

Public policy engagement

PPL actively encourages public policy that furthers our ability to safely provide reliable and affordable electricity 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, PPL'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

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.

Comprehensive natural gas safety measures include 24/7 monitoring by a central gas control room at each company; 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.

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 2021 included:

- Supporting diverse businesses – those owned by minorities, women and veterans (covering tier 1 and 2 suppliers). In 2021, the company spent \$290 million with diverse businesses. Additionally, 50% of goods and services were procured from locally based suppliers, providing economic development support to communities in our jurisdiction.
- Joining the Electric Utility Industry Sustainable Supply Chain Alliance in 2022 to work with industry suppliers and other interested parties to improve environmental performance and advance sustainable business.
- Strengthening communities through the collective charitable contributions of PPL, its employees and retirees, and the foundations of PPL and LG&E and KU totaling more than \$12 million in 2021 and partnering with our communities for economic development, disaster readiness and emergency preparedness.

- 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 more than 279,000 megawatt-hours of electricity and reduced peak demand by more than 43.5 megawatts.
- Contributing more than \$3 million through LG&E and KU and PPL Electric's customer assistance programs to help vulnerable residential customers pay their energy bills.
- Being recognized for outstanding 2021 performance in several areas, including being ranked as one of the best places to work for people with disabilities on the Disability Equality Index and receiving a perfect score of 100 on the Human Rights Campaign Foundation's Corporate Equality Index for our Pennsylvania operations.

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 commitments and we created a chief diversity officer position in 2022 to lead these efforts.

Progress toward these commitments in 2021 included:

- Increasing ethnic and racial diversity in senior leadership by 5%.
- Increasing women in senior leadership by 14%.
- Expanding the PPL Foundation's mission and focus areas to specifically include diversity, equity and inclusion programs, with nearly 20% of the funding going to diversity, equity and inclusion efforts within communities served by PPL.
- Launching an annual Powering a Brighter Future scholarship program, which will award \$1 million in scholarships to women, and racial and ethnic minorities over the next decade.
- Launching the Empowering Equitable Communities program with three initiatives: student mentoring, law enforcement dialogue and Science, Engineering, Technology and Math (STEM) literacy.
- Providing financial and volunteer support to organizations serving women and minorities.

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 we have linked executive incentive compensation to several goals aimed at climate-related and ESG performance.

PPL has developed a strategic framework to advance a clean energy future within our service territories and more broadly. 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.
- Position the grid as an enabler for clean energy resources and drive energy efficiency and demand side management.
- Drive digital innovation and R&D to enable new technologies.
- Decarbonize our non-generation operations.

Decarbonize our generation

In 2021, PPL set an ambitious goal to achieve net-zero carbon emissions by 2050. 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 includes Scope 3 emissions associated with our purchased electricity for LG&E and KU customers. We have also committed to not burn unabated coal by 2050 unless it can be mitigated with carbon dioxide removal technologies.

We continue to make progress toward our goal, and we are on track to achieve our interim targets. Through 2021, we reduced our goal-related carbon emissions nearly 60% from 2010 levels. We are working to transition our Kentucky coal-fired generation with an expected 2,000 megawatts of coal plant retirements over the next 15 years, including at least 1,000 megawatts by 2028, and to replace with lower carbon and non-emitting generation.

Position the grid as an enabler for clean energy resources and drive energy efficiency and demand side management

We are leveraging leading performance across our utilities to expand and modernize the grid and integrate utility scale renewables and distributed energy resources. PPL is working to make system enhancements necessary to meet electricity demand over the long term to support electrification efforts, including the adoption of electric vehicles.

In support of efforts to reach economy-wide electrification, PPL joined the National Electric Highway Coalition, a partnership of 17 U.S. utilities established to support the development of a seamless network of rapid electric vehicle charging stations connecting major highway systems.

We are also enabling third-party decarbonization by providing our customers and communities the tools they need to transition to a cleaner energy future, including the following initiatives active in 2021:

- LG&E and KU's Solar Share facility is more than 50% subscribed. The subscription-based Solar Share program is a cost-effective option available to residential, business and industrial customers who want to support solar energy. Upon completion, the Solar Share facility will have a total capacity of 4 megawatts.
- The Renewable Choice Calculator helps LG&E and KU customers explore their sustainability options. Based upon 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 either less than \$1 per day or about 5% more on their monthly energy bill.
- LG&E and KU also announced plans to provide renewable energy to major institutional and industrial customers from a 125-megawatt solar facility to be constructed in western Kentucky. This is in addition to the execution of a 100-megawatt power purchase agreement in 2020.
- 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.
- PPL Electric's Distributed Energy Resource Management System helps the company better integrate more distributed energy resources like private solar, while preserving network reliability and power quality. To date, PPL Electric has connected more than 257.2 megawatts of renewable energy to the grid through the program.
- PPL acquired a small ownership interest in SOO Green, a 350-mile underground transmission project that seeks to meet the growing demand for green energy by siting, permitting and developing high-voltage transmission lines underground along major rail corridors.

Drive digital innovation and R&D to enable new technologies

Achieving net-zero carbon emissions requires advances in clean energy technologies and systems that can be delivered safely, reliably and affordably for those we serve. We continue to invest in clean energy research and development to enable us to meet our net-zero by 2050 goal while driving value for our customers and shareowners. Our actions in 2021 included:

- Joining Energy Impact Partners' global investment platform, which brings together leading companies and entrepreneurs worldwide to foster innovation toward a sustainable energy future. PPL has committed to invest up to \$50 million across EIP's investment platform aimed at accelerating the shift to a low-carbon future and driving commercial-scale solutions needed to deliver deep, economy-wide decarbonization. Collaboration with EIP is expected to provide PPL greater visibility into emerging technologies that can be leveraged to advance the clean energy transition.
- Serving as an anchor sponsor of the Low Carbon Resources Initiative, a five-year initiative led by the Electric Power Research Institute and Gas Technology Institute to help accelerate research and development of low-carbon and zero-carbon technologies. PPL's CEO is helping to lead this effort as chair of the Low-Carbon Resources Initiative Board Working Group. The Low-Carbon Resources Initiative is a collaborative focused on identifying, developing and demonstrating affordable pathways to economy-wide decarbonization. This initiative is pursuing fundamental advances in a variety of low-carbon electric generation technologies and low-carbon energy carriers, 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.
- Launching an innovative partnership with the University of Kentucky's Center for Applied Research to study capture of carbon dioxide emissions at natural gas combined cycle power plants.
- Partnering with the Electric Power Research Institute on LG&E and KU's energy storage demonstration site, the first and largest utility-scale energy storage system in Kentucky. Now in its sixth year of operation, the battery is co-located with LG&E and KU's 10-megawatt E.W. Brown solar facility, allowing the company to explore how batteries can improve the inherent intermittency of solar power. Battery operations have been automated to charge during sunlight or periods of low demand and discharge overnight or during periods of high demand.
- Partnering with the PJM Interconnection to pilot dynamic line rating sensors, which allows transmission owners like PPL Electric to maximize our infrastructure by delivering more electricity on existing transmission lines.

Decarbonize 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. Our new fleet electrification and building energy use goals discussed below are linked to operational performance and executive compensation.

We have strengthened our commitment to fleet electrification by setting goals for electric vehicle adoption. PPL's operating companies are electrifying their light, medium and heavy-duty fleet vehicles and employing the use of electric lifts on bucket trucks. Our goals include electrifying 50% of medium/heavy duty vehicles by 2030; electrifying 100% of light-duty vehicles and indoor forklifts by 2030; and converting 80% of heavy-duty vehicles with electric lift technology by 2025 (PPL Electric) and 2030 (LG&E and KU).

In addition to electrification of our fleet vehicles, PPL has set energy use goals that include reducing energy consumption by 28% in our buildings by 2030; and installing 1 solar array per company annually to help offset energy use.

PPL's operating companies continue to work to reduce sulfur hexafluoride (SF₆) greenhouse gas emissions through maintenance and equipment replacement. For example, PPL Electric has been using data analytics since 2015 to predict the failure rates of circuit breakers so that they can be replaced or repaired before SF₆ is released. This has resulted in top-decile performance for leak reduction, according to U.S. Environmental Protection Agency benchmark data.

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. Additionally, RIE is undertaking a 12-month study of its natural gas system considering Rhode Island's Act on Climate and decarbonization goals.

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 2021 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:

Topic Area	Link
Climate Goals and Related Analysis	<ul style="list-style-type: none"> • Climate Action • Climate Assessment Report • Sustainability disclosures including: <ul style="list-style-type: none"> – CDP climate questionnaire – SASB mapping – TCFD mapping
Diversity, Equity and Inclusion	<ul style="list-style-type: none"> • DEI strategy • 2021 Corporate Sustainability Report (pages 38-40)
General ESG Disclosure	<ul style="list-style-type: none"> • 2021 Corporate Sustainability Report (GRI Index, page 50) • SASB
Human Capital Management	<ul style="list-style-type: none"> • 2021 Corporate Sustainability Report (pages 38-43)
Public Policy	<ul style="list-style-type: none"> • Public Policy Disclosures
Research and Development	<ul style="list-style-type: none"> • CDP 2021 climate questionnaire (to be updated) • 2021 Corporate Sustainability Report (page 27)

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.

Quantitative Section

Parent Company:	PPL Corporation
Operating Company(s):	PPL Electric Utilities (PPL Electric), and Louisville Gas & Electric and Kentucky Utilities (LG&E and KU)
Business Type(s):	Fully regulated utilities; T&D (Pennsylvania) and T&D plus regulated generation (Kentucky)
State(s) of Operation:	Pennsylvania, Kentucky, Virginia and Tennessee
State(s) with RPS Programs:	Pennsylvania (mandatory)
Regulatory Environment:	Regulated
Report Date:	8/31/2022

PORTFOLIO			
Ref. No.		Last Year - 2020	Current Year - 2021
1	Owned Nameplate Generation Capacity at end of year (MW)	7,561	7,535
1.1	Coal	4,715	4,715
1.2	Natural Gas	2,742	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	-	-

2	Net Generation for the data year (MWh)	30,541,195	31,579,370
2.1	Coal	24,583,169	25,233,579
2.2	Natural Gas	5,450,386	5,801,026
2.3	Nuclear	-	-
2.4	Petroleum	1,480	170
2.5	Total Renewable Energy Resources	506,160	544,595
2.5.1	Biomass/Biogas	-	-
2.5.2	Geothermal	-	-
2.5.3	Hydroelectric	367,204	351,696
2.5.4	Solar	138,956	192,899
2.5.5	Wind	-	-
2.6	Other	-	-

2.i	Owned Net Generation for the data year (MWh)	29,916,634	31,336,074
2.1.i	Coal	24,038,977	25,014,595
2.2.i	Natural Gas	5,370,017	5,776,714
2.3.i	Nuclear	-	-
2.4.i	Petroleum	1,480	170
2.5.i	Total Renewable Energy Resources	506,160	544,595

Ref. No.		Last Year - 2020	Current Year - 2021
2.5.1.i	Biomass/Biogas	-	-
2.5.2.i	Geothermal	-	-
2.5.3.i	Hydroelectric	367,204	351,696
2.5.4.i	Solar	138,956 ¹	192,899 ²
2.5.5.i	Wind	-	-
2.6.i	Other	-	-

2.ii	Purchased Net Generation for the data year (MWh)	624,561	243,296
2.1.ii	Coal	544,192	218,984
2.2.ii	Natural Gas	80,369	24,312
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	-	-

3	Capital Expenditures and Energy Efficiency (EE)		
3.1	Total Annual Capital Expenditures (nominal dollars)	\$1,154,000,000 PPL Electric Utilities \$966,000,000 Louisville Gas & Electric and Kentucky Utilities \$993,000,000 Western Power Distribution	\$904,000,000 PPL Electric Utilities \$1,026,000,000 Louisville Gas & Electric and Kentucky Utilities
3.2	Incremental Annual Electricity Savings from EE Measures (MWh)	307,572	279,053
3.3	Incremental Annual Investment in Electric EE Programs (nominal dollars)	\$55,004,266	\$53,946,490

4	Retail Electric Customer Count (at end of year)	10,747,565 ³	2,797,026 ⁴
4.1	Commercial	341,568	344,525
4.2	Industrial	6,102	5,915
4.3	Residential	2,418,244	2,428,825

¹ Includes 122,351 MWh generated by Safari Energy, LLC.

² Includes 176,372 MWh generated by Safari Energy, LLC.

³ Total number includes WPD end users and LG&E and KU customers in other customer classes.

⁴ Total number includes LG&E and KU customers in other customer classes. Excludes WPD end users.

EMISSIONS

Ref. No.		Last Year - 2020	Current Year - 2021
5	GHG Emissions: Carbon Dioxide (CO₂) and Carbon Dioxide Equivalent (CO₂e)		
5.1	Owned Generation		
5.1.1	Carbon Dioxide (CO ₂)		
5.1.1.1	Total Owned Generation CO ₂ Emissions (MT)		
5.1.1.2	Total Owned Generation CO ₂ Emissions Intensity (MT/Net MWh)		
5.1.2	Carbon Dioxide Equivalent (CO ₂ e)		
5.1.2.1	Total Owned Generation CO ₂ e Emissions (MT)	24,973,621	26,373,750
5.1.2.2	Total Owned Generation CO ₂ e Emissions Intensity (MT/Net MWh)	0.835	0.842
5.2	Purchased Power		
5.2.1	Carbon Dioxide (CO ₂)		
5.2.1.1	Total Purchased Generation CO ₂ Emissions (MT)		
5.2.1.2	Total Purchased Generation CO ₂ Emissions Intensity (MT/Net MWh)		
5.2.2	Carbon Dioxide Equivalent (CO ₂ e)		
5.2.2.1	Total Purchased Generation CO ₂ e Emissions (MT)	4,673,449	4,275,989
5.2.2.2	Total Purchased Generation CO ₂ e Emissions Intensity (MT/Net MWh)	0.413	0.370
5.3	Owned Generation + Purchased Power		
5.3.1	Carbon Dioxide (CO ₂)		
5.3.1.1	Total Owned + Purchased Generation CO ₂ Emissions (MT)		
5.3.1.2	Total Owned + Purchased Generation CO ₂ Emissions Intensity (MT/Net MWh)		
5.3.2	Carbon Dioxide Equivalent (CO ₂ e)		
5.3.2.1	Total Owned + Purchased Generation CO ₂ e Emissions (MT)	29,647,070	30,649,739
5.3.2.2	Total Owned + Purchased Generation CO ₂ e Emissions Intensity (MT/Net MWh)	0.708	0.711
5.4	Non-Generation CO₂e Emissions of Sulfur Hexafluoride (SF₆)		
5.4.1	Total CO ₂ e emissions of SF ₆ (MT)	43,616	10,436
5.4.2	Leak rate of CO ₂ e emissions of SF ₆		
6	Nitrogen Oxide (NOx), Sulfur Dioxide (SO₂), Mercury (Hg)		
6.1	Generation basis for calculation		
6.2	Nitrogen Oxide (NOx)		
6.2.1	Total NOx Emissions (MT)	11,948	12,571
6.2.2	Total NOx Emissions Intensity (MT/Net MWh)	0.000399	0.00040
6.3	Sulfur Dioxide (SO₂)		
6.3.1	Total SO ₂ Emissions (MT)	13,194	15,225
6.3.2	Total SO ₂ Emissions Intensity (MT/Net MWh)	0.000441	0.00049
6.4	Mercury (Hg)		
6.4.1	Total Hg Emissions (kg)	48.0	46.3
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	1.60E-06	1.48E-06

RESOURCES

7	Human Resources		
7.1	Total Number of Employees	12,318 ⁵	5,607
7.2	Percentage of Women in Total Workforce	22.3% ⁶	28.2%
7.3	Percentage of Minorities in Total Workforce	6.5% ⁷	12.1%
7.4	Total Number on Board of Directors/Trustees	10	10
7.5	Percentage of Women on Board of Directors/Trustees	20%	30.0%
7.6	Percentage of Minorities on Board of Directors/Trustees	30%	30.0%
7.7	Employee Safety Metrics		
7.7.1	Recordable Incident Rate	1.18 ⁸	1.24
7.7.2	Lost-time Case Rate	0.30 ⁹	0.42
7.7.3	Days Away, Restricted, and Transfer (DART) Rate	0.53 ¹⁰	0.57
7.7.4	Work-related Fatalities	0.00 ¹¹	0.00

8	Fresh Water Resources used in Thermal Power Generation Activities		
8.1	Water Withdrawals - Consumptive (Millions of Gallons)	130,975	135,829
8.2	Water Withdrawals - Non-Consumptive (Millions of Gallons)	116,847	114,155
8.3	Water Withdrawals - Consumptive Rate (Millions of Gallons/Net MWh)	0.00406	0.00454
8.4	Water Withdrawals - Non-Consumptive Rate (Millions of Gallons/Net MWh)	0.00362	0.00382

9	Waste Products		
9.1	Amount of Hazardous Waste Manifested for Disposal	680.02 ¹²	6.50
9.2	Percent of Coal Combustion Products Beneficially Used	58.4%	71.0%

⁵ The number of employees without WPD is 5,715.

⁶ The percentage of women in total workforce without WPD is 28.4%.

⁷ The percentage of minorities in total workforce without WPD is 11.2%.

⁸ Recordable Incident Rate without WPD is 1.64.

⁹ Lost-time Case Rate without WPD is 0.53.

¹⁰ DART rate without WPD is 1.03.

¹¹ Work-related Fatalities remain at 0 without WPD.

¹² Amount of Hazardous waste without WPD is 2.72.

EMISSIONS REDUCTION GOAL

Goal Applicability	Baseline Year	Target Year	Reduction Goal Description (Short)	Source (URL)
LGE, KU, and PPL Electric	2010	2035	PPL has set an interim goal of CO ₂ e reductions of 70% from 2010 levels by 2035.	https://www.pplweb.com/sustainability/climate-action/
LGE, KU, and PPL Electric	2010	2040	PPL has set an interim goal of CO ₂ e reductions of 80% from 2010 levels by 2040.	https://www.pplweb.com/sustainability/climate-action/
LGE, KU, and PPL Electric	2010	2050	PPL set a goal of achieving net zero CO ₂ e emissions by 2050. Goal-related emissions include those from owned generation, LG&E and KU purchased power, fleet vehicles, fugitive emissions (SF ₆) and company building energy use.	https://www.pplweb.com/sustainability/climate-action/
LGE, KU, and PPL Electric	2019	2030	PPL established new fleet vehicle goals in 2021 which includes 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).	https://www.pplweb.com/sustainability/climate-action/
LGE, KU, and PPL Electric	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	https://www.pplweb.com/sustainability/climate-action/

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, CO₂e, 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

Parent Company: PPL Corporation
Operating Company(s): Louisville Gas & Electric (LGE)
Business Type(s): Fully regulated gas distribution utility
State(s) of Operation: Kentucky
Regulatory Environment: Regulated
Report Date: August 31, 2022

NATURAL GAS DISTRIBUTION

Ref. No.		Last Year - 2020	Current Year - 2021
1	Methane Emissions and Mitigation from Distribution Mains		
1.1	Number of Gas Distribution Customers	330,529	331,457
1.2	Distribution Mains in Service		
1.2.1	Plastic (miles)	2,202	2,222
1.2.2	Cathodically Protected Steel - Bare & Coated (miles)	2,196	2,196
1.2.3	Unprotected Steel - Bare & Coated (miles)	-	-
1.2.4	Cast Iron / Wrought Iron - without upgrades (miles)	-	-
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)	-	-

2	Distribution CO₂e Fugitive Emissions		
2.1	CO ₂ e Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	22,177.25	22,091.50
2.2	CH ₄ Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	887.09	883.66
2.2.1	CH ₄ Fugitive Methane Emissions from Gas Distribution Operations (MMSCF/year)	46.2	46.0
2.3	Annual Natural Gas Throughput from Gas Distribution Operations in thousands of standard cubic feet (Mscf/year)	46,474,061	43,272,834
2.3.1	Annual Methane Gas Throughput from Gas Distribution Operations in millions of standard cubic feet (MMscf/year)	44,150.36	41,109.19
2.4	Fugitive Methane Emissions Rate (Percent MMscf of Methane Emissions per MMscf of Methane Throughput)	0.10%	0.11%

NATURAL GAS GATHERING AND BOOSTING

1	Methane Emissions		
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 ₂ e)		

2	CO₂e Combustion Emissions for Gathering & Boosting Compression		
2.1	CO ₂ e Emissions for Gathering & Boosting Compression Stations (metric tons)		

3	Conventional Combustion Emissions from Gathering & Boosting Compression		
3.1	Emissions reported for all permitted sources (minor or major)		
3.1.1	NOx (metric tons per year)	2.53	2.00
3.1.2	VOC (metric tons per year)	5.58	4.96